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Preparing the Building Program for a General Hospital

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IN A report prepared for the committee on construction of the American Hospital Association several years ago, an attempt was made to point out the more important questions that demand consideration in the first stages of the preparation of a building program for a general hospital. The following restatement of the subject has been developed from the earlier text. Again an attempt has been made to be brief rather than discursive, suggestive rather than comprehensive. This article makes no pretension of conveying technical instructions for the actual planning of a hospital, a task that would require a far more voluminous text and a much more elaborate method of treatment.

The capacity of the hospital is the first point the building committee is called upon to determine, and often an initial figure is arbitrarily proposed which bears no real relation to actual needs. In other instances the starting point is a given sum of money; when the size of the available building fund is known, a rough estimate is obtained of the "cost of construction per bed" (an alluring but often a misleading term), and the size of the hospital to be built is thus determined. It is true that one is often compelled to cut one's garment according to the cloth, but in the planning of a hospital this is a poor rule, for even if the amount of money available is insufficient to build immediately the hospital that the community needs, an ideal program may wisely be formulated in the hope that it will be realized step by step. It may even happen that a clear and irrefutable statement of needs will enlist support previously lacking.

Factors That Influence Size

In determining the size of a hospital, the population to be served is the first element to be considered. Number, character and rate of growth call for separate attention. Relevant questions are the economic resources of the community, prevailing occupations that involve special health hazards, the manner in which families and individuals without family ties are housed, hospital facilities already available in the neighborhood, the sickness rate of the community, the presence of groups possessing special characteristics or customs (a racial group may be noted for its unusually large birth rate or for its habitual employment of midwives instead of doctors), and institutional preferences or prejudices associated with racial characteristics or religious beliefs.

What is the best size for a hospital? For a theoretical answer to this question the reader is referred to an article entitled "The Drift Toward

Hospital Amalgamation," published in THE MODERN HOSPITAL in January, 1928. Reasons are there given for preferring a general hospital of from 500 to 600 beds; but without forgetting the principles involved in the most efficient organization of a complete general hospital, we must admit that a small community or even a larger community, in special circumstances, may be justified in planning upon a different scale. It is of the utmost importance that the building committee formulate its problem and state the reasons that justify its chosen program.

Important Preliminary Questions

To determine the total number of beds is of course only the first step. How should these beds be classified? What proportion of the total number of patients to be cared for are likely to be in a position to meet the cost of private rooms? What will be the net cost of maintaining a private patient in a large room with bath, in a moderate sized room with private toilet, in a smaller private room of the utmost simplicity or in a partitioned cubicle? Are rates equivalent to the esimated costs customarily paid by private patients in the same community? If such rates are not paid, is it reasonable to assume that the hospital will be called upon to rent its private rooms at less than actual cost, and in that case the resources will then be available to balance the budget? How many patients will seek, or should be persuaded to accept, semiprivate accommodations? Shall semiprivate wards contain two, three, or four beds each? For how many patients may "public" ward beds appropriately be provided? Is the community one in which the incomes of a considerable part of the population fluctuate, and should the hospital plan, therefore, be of so flexible a character that the line which separates public from semiprivate wards as well as that which separates the semiprivate from the private room service may be readily shifted? What is the largest acceptable size for a public ward? (In this connection cost of construction, cost of maintenance and the prevailing local standard should be considered.) What comforts (day rooms, dining rooms, separation rooms, solariums, roof gardens) should be provided for the patients? Which of these ward accessories can be used in common by patients of different social classes or of opposite sexes and which must be duplicated? Is it possible to plan in a manner that will permit optional ward appendages to be discarded, if the financial position of the hospital should eventually require the sacrifice, without redesigning the entire structure?

If the building program has to do with the expansion of an old hospital, to what extent can the existing buildings be adapted to the larger program? Are these buildings reasonably safe as fire risks? While no useful structure should be hastily discarded, the retention of a small building of slight value in a location where it will prevent for all time the most advantageous utilization of a hospital site for an important group of buildings should not be thoughtlessly agreed to.

What is the contemplated scheme of clinical organization? Besides the basic departments of medicine, surgery, obstetrics and pediatrics—essential elements in a general hospital—what clinical branches are to be recognized? In this connection, consideration must be given to the diseases of women, diseases of the eye, ear, nose and throat, venereal diseases, urology, orthopedics, dermatology, tuberculosis, metabolic diseases, neurology and psychiatry. Is it desirable to prepare in advance for future clinical classifications not now commonly recognized? Will the medical and surgical specialties, so-called, be organized as independent departments, or will they function as minor subdivisions of the major departments of medicine and surgery? Will children belonging to the "specialties" be housed with or near adult patients of similar classification, or will all children be placed together in an independent department or institute, physically divorced from the adult service? And, finally, what is to be done about contagious diseases? This is a question that must be answered with due regard to local sanitary regulations as well as from the standpoint of hospital and community need.

Selecting the Site

The characteristics of a site appropriate to the present and future building program should be defined before a selection is made. The volume and character of the work to be done and the determination of the type of building or buildings best suited to this work will point the way to the proper size of the site. Study of the residential distribution of the population to be served should influence the choice of location. From the standpoint of actual construction, the size, shape and contour of the plot and the character of the soil as related to the foundations are to be reckoned with. Water supply and drainage will be considered as a matter of course. Accessibility is an item of some importance. In crowded cities in which acreage is scarce, hospitals should make every effort to obtain sites adjoining public parks. Two or three acres in an accessible location immediately overlooking a large park may be more valuable for community hospital purposes than twenty acres in a distant locality (always assuming that space can be reserved or acquired for

future expansion). Sky, trees, grass and flowers are sources of pleasure, inspiration and mental and bodily health, and are worthy of a place in every hospital program. Depressing surroundings should be avoided and undesirable encroachments guarded against.

Future Expansion

The immediate building program and the future expansion of the hospital should be considered separately. Clinical expansion may be anticipated in two directions. In the case of a general hospital in which the various clinical specialties are at the outset either unrepresented or incompletely represented, the subsequent introduction of additional clinical departments may be taken for granted, while in the case of a hospital that is completely organized at the outset, the probable rate of growth of each of the different clinical divisions must be considered. The expansion of therapeutic departments and of the administrative organization of the hospital should not be overlooked. Consider also possible changes in function. Is the hospital likely from time to time to undertake new space-demanding activities such as preventive medicine or popular health education?

Are separate convalescent wards desired, or is there to be an affiliation with a branch hospital for the treatment of convalescents? To what extent will such an affiliation result in accentuating the demands on the main hospital and in increasing its daily or monthly patient output, thus necessitating additions to the staff and the extension of resident staff accommodations and increased treatment facilities?

In the teaching hospital special needs are encountered. Lecture rooms and a library must be featured, the out-patient department expanded and modified to satisfy the needs of student assistants, living accommodations for residents proportionately increased, and locker rooms, toilet accommodations, lunchrooms and perhaps a separate entrance for medical students provided. Private consulting offices may be required for members of the staff whose time is pledged chiefly to the teaching service of the hospital but who are granted the privilege of private intramural consultations. Physical and administrative relations between the hospital and the laboratories of the medical school demand consideration. A clearly defined method of procedure acceptable to the staff, not an outmoded precedent, must be the architect's guide in determining the need and size of amphitheaters, classrooms and demonstration rooms.

The location, size and equipment of the clinical record room depend in part on the proposed method of administration. In some hospitals the clinical records of both in-patient and out-patient departments are assembled at a single center. It is wise to provide proper space in the record room for the accumulation of the records of at least ten years but as records may be valuable for medicolegal or scientific purposes for a much longer period, additional fireproof storage space for older records is indispensable. The modern record room is not merely a storage or filing place. It is a statistical research center, and it should therefore include ample space for the private examination of its accumulated material by independent groups of investigators. Among the essential requirements of the record room are accessibility and quiet.

The complete hospital includes a medical library. In hospitals of moderate size it seems desirable to locate this near the clinical record room, so that the same person or persons can supervise both the library and the clinical record room. In teaching hospitals the size and location of the library should be adjusted to the requirements of undergraduate students.

The number of operating rooms should be calculated with relation to the total number and kinds of surgical cases to be treated and with due regard to the organization and working methods of the staff. In a staff or "closed" hospital the number of operating rooms required is relatively smaller than in an "open" hospital where the working habits and convenience of a larger number of visiting surgeons enter into the case. The special needs of the eye, ear, nose and throat, orthopedic and urologic departments call for consideration, but it is uneconomical and may be unnecessary in a relatively small hospital to assign to each group operating rooms for exclusive but only occasional use.

Operating Room Problems

The architect will need guidance in planning operating room accessories. How large a dressing and locker room is desired for the visiting staff? Does each surgeon need a private locker? Is a lounging room required? Is a separate dressing room required for the house staff? Where are the surgical supplies to be prepared and sterilized, and how much space will be required for the purpose? Will patients be anesthetized in separate rooms or in the operating rooms? Is a central recovery ward desired? Do the surgeons demand skylights or will vertical north windows be accepted? Is reliance to be placed chiefly on artificial rather than natural illumination? An emergency lighting system is indispensable. What safeguards are necessary against gas explosions? Is natural ventilation practicable? What benefits can be derived from air conditioning? What are the most desirable width, length and height of an operating room? Consider

material and color of finish. Will portable observation stands for spectators suffice, or are built-in galleries called for? In locating and designing scrub-up sinks, utility rooms and fixed equipment generally, the requirements of both convenience and asepsis should be remembered.

Before planning the laboratory it is desirable to get the fullest information possible from those who are to be in actual charge of the laboratory work. All of the laboratory work of a small hospital can be done in a single room, but in that case the equipment of the room will be most varied. In larger hospitals, separate rooms are usually wanted for (1) pathology and histology, (2) bacteriology and immunology, (3) biologic chemistry, (4) routine clinical pathology and (5) hematology. The manner in which the house staff and the medical students, if there are any, are to participate in the laboratory work of the hospital should be defined. Laboratory facilities of a modest kind may be demanded in connection with each ward. The hospital should define its policy in relation to scientific research. If laboratory investigations are to be intensively prosecuted, rooms and equipment must be provided for this work apart from those intended for routine work. Quarters for test animals are essential, and for a research laboratory an animal operating room will be required. The location and ventilation of animal rooms must be such that odors will not reach and offend patients. The location of the major laboratories in a position accessible to in-patient and out-patient departments has certain advantages, but this location may not be a good one for the morgue and autopsy room. Ambulatory and other patients may be brought to the laboratory for investigative purposes, and suitable accommodations must be provided for them.

The X-Ray Department and Its Facilities

The plans for the department of radiology, embracing radiography, fluoroscopy and radiotherapy, call for careful study, to which the radiologist should contribute. The staff should decide whether all x-ray examinations and treatments are to be carried out in a central department, or whether fluoroscopic tests and certain combined x-ray and clinical examinations and treatments are to be done elsewhere. How, for example, is the x-ray work that is associated with urology to be handled? A room in the x-ray department where radiography can be done in conjunction with the surgical treatment of fractures and the examination of foreign body cases will probably be demanded. The use of a portable x-ray unit in the wards should be considered. The x-ray service of a large hospital is a voluminous affair, and due consideration must be given to office requirements, waiting room needs, dressing and rest rooms, equipment for examination of films and the functioning of the all-important developing room.

Other diagnostic and therapeutic divisions are the cardiographic laboratory (with a small dark room attached and with or without its special system of ward wiring); the respiration laboratory, which for convenience is often associated with the chemical laboratory; a department for radium treatment; a physiotherapy department, including facilities for hydrotherapy, thermotherapy and mechanotherapy, and a department of occupational therapy. The extent and character of the proposed dental service require definition. The satisfactory recording of certain clinical phenomena demands the use of photography.

Determining Receiving Ward Capacity

Receiving or observation wards, which are difficult to classify clinically owing to the miscellaneous character of the service demanded of them nevertheless facilitate greatly the proper classification and handling of newly admitted patients. What shall be their capacity? To answer this question intelligently the hospital's probable admission rate and its method of handling newly admitted patients must be known. Shall the children's detention ward be part of the general department for new admissions, or can it be more advantageously correlated with the pediatric service? What facilities are required, in the central admitting department or elsewhere, for the detention and observation of mentally disturbed patients? Is it desirable to combine with or append to the receiving ward space for the overnight care of tonsil and adenoid cases?

Is the hospital locality one in which accidents are many or few? Will a single emergency treatment room suffice? An emergency treatment room or rooms and the ambulance entrance should be close to the receiving wards. What are the most desirable relations between this section and the major operating rooms and the x-ray department? How near are bedrooms for the resident staff members who are subject to night emergency calls?

Balconies, roof wards and solariums comprise a group of facilities of importance to effective medical care, and the building committee must decide upon their number, size, exposure, screening and their equipment for possible use as emergency or overflow wards.

The plan of the out-patient department may be a liberal one, including separate accommodations for the departments of medicine, pediatrics, obstetrics, neurology, mental hygiene, dermatology and syphilis, surgery, diseases of the eye, ear, nose and throat, gynecology, orthopedics, gastrology,

dentistry, infant hygiene and adult hygiene. A more modest program may be chosen, one that requires that groups of departments utilize the same rooms at different hours. In estimating out-patient capacity it must be remembered that the capacity of a department may be doubled by holding two daily sessions instead of one. The utilization of an out-patient department for teaching purposes markedly affects the character of the plan. Other factors to be considered in out-patient planning are: central or common record room *versus* individual departmental record keeping; the manner in which patients are to be received and their histories taken; whether or not a classifying examination is to be made before the patient is assigned to a special clinic; a flexible central waiting rooms *versus* individual departmental waiting rooms; unrestricted attendance *versus* a regulated appointment system; the utilization of the out-patient department as a clinic for paying patients or for follow-up work in connection with the hospital's ward service; the conduct of out-patient social service work in central offices or in the various clinics, or both; the advisability of providing a lunchroom for waiting patients; the location of temporary detention rooms for contagious suspects and the exit therefrom; the relation of the out-patient department to the receiving and emergency wards; recovery and rest rooms in the surgical departments; the productive or time saving value of duplicate dressing cubicles in connection with simple examining rooms; utilization of laboratory and therapeutic facilities of the hospital proper *versus* separate out-patient department equipment; departmental laboratories for individual clinics; elevator service; ventilation (natural and forced); choice of location for individual departments (daylight is more important for some than for others, while quiet is not equally essential for all); choice of materials for the interior finish as an aid to cleanliness and ease of maintenance.

Planning the Business Unit

For the planning of the administrative or business center of the hospital, certain information is requisite: the number and functions of the hospital's executive officers; the number of officials connected with the training school for nurses; the number of heads of other administrative departments; the number of employees in the accounting department; the method of receiving, registering and admitting patients (all patients may be received at a single entrance or a separate entrance may be provided for private patients or for children); the numerical strength and methods of the social service organization. The telephone system calls for careful consideration. Location of the telephone "central," booths for public use and the interior and exterior telephone service for the officials, staff and employees must all be carefully planned. What other systems of communication and of signaling can be employed advantageously? Is a clinical conference room requisite? If so, what size should it be and should it be made accessible to nonstaff visitors? The location of the staff's registration room and the location and number of staff sitting rooms, lounging and locker rooms and consulting offices should be considered.

Nurses' Home Requirements

Among the topics to be considered in connection with the nurses' home are: total capacity; correlation of the teaching facilities with the teaching program, the number and size of the classrooms, the capacity of the assembly hall, the classification of laboratories, the arrangement of demonstration rooms and the number of instructors' offices; library, reception and living rooms; students' bedrooms—their size, ventilation, closets and lavatories; special quarters for night nurses; bathing and toilet facilities; location and access to special quarters for ward attendants or nurses' aids; balconies and sleeping porches; nurses' infirmary; recreation room; gymnasium; servants' quarters; linen, trunk and storage rooms; nurses' kitchenettes and hand laundry; tennis court; swimming pool; connection between the nurses' home and the hospital. In smaller hospitals the nurses' meals are usually served from the central hospital kitchen. Larger hospitals often prefer a separate kitchen for the nurses' home as well as separate dining rooms for students, graduates, officers and special nurses. A locker and dressing room for nonresident nurses should be provided in the nurses' home or elsewhere.

Dormitories and living rooms apart from those in the nurses' home are required for the superintendent (frequently the superintendent has a cottage of his own on or off the hospital grounds), for executive assistants and for the resident medical staff. Accommodations may be needed for interns of both sexes. Special rooms or suites for senior residents are to be considered. Recreation space for the resident staff is desirable. A staff house like the nurses' home is no longer unusual. Separation of staff quarters from the hospital proper, if the distance is not excessive, may add to the comfort of both patients and staff. Local custom and local circumstances will determine how large a percentage of the domestic and other miscellaneous workers shall be lodged in hospital buildings. The question of locker and lounging rooms for nonresident workers is complementary to the question of dormitories.

No attempt should be made to plan a hospital kitchen and its accessory serving rooms without previous agreement upon a food service scheme. It is essential to know not only the number of persons to be fed but also whether food is to be sent to the wards and private patients' corridors in bulk or on individual trays; whether a common kitchen or separate kitchen installations are wanted for private and ward patients, as well as for the hospital and the nurses' home, respectively; whether there is to be a special diet kitchen for "feeding" cases; what work is to be done in the ward pantries; whether pupil nurses and pupil dietitians are to be instructed in the main kitchen, the hospital diet kitchen, or in a special dietetics laboratory.

The storing and handling of perishable and nonperishable food supplies call for careful consideration. The location of the offices of the dietitians is important. The capacity of the dining rooms for various classes of hospital inmates must be studied, and the question of waitress service *versus* self-service considered. Frequently an interchangeable plan will be thought best. In large hospitals, it is desirable that the medical, administrative, nursing and domestic service groups be afforded convenient and separate access to their several dining rooms.

Planning the Laundry

The laundry should be planned with relation to the volume and kind of work to be done and should be located in a manner convenient for service. It should nevertheless be located where the operation of its machines will not annoy patients either by vibration or by noise. The most modern labor-saving devices should be installed. Future growth will naturally receive consideration. The architect should know whether the hospital proposes to reclaim used surgical dressing gauze; how much space is wanted and in what location for sewing and mending, for the storage of linens and for distributing laundered goods. The method of collecting soiled linen and the utilization of linen chutes must be considered. Sufficient space should be available for the storage of laundry trucks. Sanitary conveniences for the laundry help should not be far off. The functioning of "auxiliaries" in connection with the linen department frequently calls for an allotment of space.

Whether the clothing of ward patients is to be cared for in rooms adjoining the wards or in a central clothes room for patients is a matter of hospital policy. Prior to storage, patients' clothes may require steam sterilization or fumigation; after storage, cleaning and pressing.

It is for the hospital to determine the exact nature of all the miscellaneous fixed equipment required for nursing or other purposes in connection with each ward unit, remembering that all wards are not alike in their requirements. The best results will be obtained when the numerous details of ward management and service are systematically reviewed in conference with the hospital superintendent and the chief of the nursing department. The ward is the focal point of all hospital service, but ward planning is a topic too complicated to be discussed here at length.

Engineering Problems

Will it be profitable for the hospital to produce its own light and power? Can the boiler equipment originally installed be expanded without costly removal or reconstruction? What type of boiler is most economical for the required service? What provision should be made for breakdown or emergency service? What fuel is to be used—coal or oil? How accessible are reliable sources of fuel supply? What should be the extent of the storage facilities for fuel? In what location will the smoke-stack be least objectionable? What space will be required for various workshops, which the engineer will be expected to supervise? What is the most suitable type of refrigeration apparatus. What is the twenty-four-hour refrigeration demand (a) for beverage and clinical purposes, (b) for the cooling of boxes and cold storage rooms (c) for the production of ice?

For each hospital and for each part of the hospital the problem of ventilation should be separately worked out, but an agreement should first be reached on the hygienic principles of air supply and treatment. In some instances, legal requirements will govern ventilation, but the hospital's own standards are likely to be as high or higher than the minimum demands of the law. It is a good plan to avoid mechanical ventilation when natural ventilation will serve.

Before deciding upon the number and size of the elevators, it should be ascertained whether the visiting staff will be large or small; whether patients in bed or in wheel chairs will be sent to the roof or the garden and in what numbers; whether visitors are likely to be few or many. For hospital buildings of only a few stories, high-speed elevators are not necessary, nor for higher structures is it necessary or, in the case of patients' elevators, desirable, to use elevators as speedy as those encountered in office buildings. Self-leveling devices are important for food service lifts and for patient transport. The question of automatic *versus* manual controls merits careful comparison of cost and service value in each instance. Uniformly elaborate elevator equipment is not required for all departments or services. Elevator cabs should be of suitable size and designed to resist wear and

tear, and emergency elevator exits are worth while.

Shall the heating system be hot water or steam? Is the city water supply ample or must it be supplemented? Is water filtration necessary? Is treatment of the general water supply desirable on account of peculiar local conditions? Is a sewage disposal plant required? What are the legal and what the practical requirements in the matter of fire stairs, fire escapes, fire apparatus and signal systems? Is the garbage to be carted away or to be incinerated on the premises? Is a central incinerator sufficient, or are local incinerators desirable for certain departments?

The question of story heights is one that can hardly be decided until the plans are in semifinal shape. In a composite building, it is the average need that governs rather than the absolute requirement of any given room. If possible, rooms requiring unusual ceiling heights should be so located as to avoid the necessity of wasting cubage in adjacent rooms at the same floor level. Ramps solve certain problems but raise new problems of their own. No ramp is desirable; steep ramps are a nuisance and are even dangerous.

The hospital authorities should study and should express their preferences concerning the materials to be used for walls, floors, stairways, partitions, built-in cabinets and trim, interior finish and window glass (including forms permeable to ultraviolet rays); concerning the width of corridors; the maximum and minimum size of patients' rooms; the number and location of nurses' stations and their equipment; concerning sterilizing equipment; vacuum cleaning systems; plumbing fixtures for every kind of hospital use; the length and width of doors; types of fenestration; transoms; the height of window sills; the illumination of wards and operating rooms; also in relation to built-in clothes closets; portable lockers; time clock systems; radio service; the care of mattresses; the location and arrangement of storerooms and trunk rooms; the number, location and equipment of cleaners' closets, flower closets, supply closets and airing closets, and the need of a garage and a mortuary chapel.

Preliminary Estimate of Cost

With the guidance of the foregoing notes, the outlines of a comprehensive program for a general hospital can be prepared. At this stage it will be wise to pause and consider what the tentative program signifies in the way of outlay. This can best be done by the preparation of rough preliminary plans, from which approximate cubical contents may be calculated. In this preliminary study as well as in the subsequent modification of the program the knowledge of experts of wide experience can be advantageously brought into play. New ideas should be vigorously sought and sympathetically considered but not hastily adopted. Nothing should be either taken into or excluded from the building program without a competent and impartial appraisal of its service value. It is not safe to be guided absolutely by the opinions of departmental enthusiasts who have a valuable contribution to make but who frequently recommend peculiar devices that lack the test of time and who cannot reasonably be expected to see the problem of the hospital as a whole.

What Mental Illnesses Cost the Country at Large

The annual economic loss in the United States because of mental ailments is estimated at approximately $742,000,000, says Horatio M. Pollack, New York State Department of Mental Hygiene.

Of this amount, $575,000,000 covers the average annual earnings of more than 53,000 males and 38,000 females treated as first admissions. The remainder covers hospital maintenance and services to the patients.

The loss for the nation as a whole has been estimated on the statistics for New York State for the fiscal year ended June 30, 1931, with proper factors taken into account.

Benjamin Malzberg, statistician, New York State Department of Mental Hygiene, corroborates Mr. Pollack's statement and calls attention to the fact that mortality among the mentally diseased is from three to six times as high as that among the general population. He says that the higher rates of mortality result in a rapid reduction in the life table population of the patients with mental diseases, 25 per cent dying in groups from 4 to 6 years, 50 per cent from 13 to 17 years, and 75 per cent in those from 28 to 29 years.

In the general population the corresponding periods would be about 32, 47 and 58 years, respectively. Such heavy mortality results in a reduction of about eighteen and fourteen years in the life spans of male and female patients.

There are significant differences in the direction of the trends of the mortality rates in the early years.

The male patients in the civil hospitals suffering from mental diseases, according to Mr. Malzberg, have an expectation of life of 19.02 years at 22 years of age, compared with 18.26 years among the females. In the general population in 1930 the corresponding expectations were 41.40 years and 42.98, respectively.

Facing Fifth Avenue and Central Park, the semiprivate pavilion at Mt. Sinai Hospital, New York City, is one of the newer ventures in providing hospital care at a moderate price.

A Home Where Young Convalescents Regain Their Health

By H. ELDRIDGE HANNAFORD
Samuel Hannaford & Sons, Architects, Cincinnati

THE new Children's Convalescent Home, Cincinnati, is designed primarily to fill an urgent need which grew out of the comprehensive program of general medical care that has been developed by the various public and private institutions of the city during the past six or seven years. While these institutions provided hospitalization for the acutely sick in all walks of life, they were not adequately designed to meet the problem of the convalescent child. An institution of this type was therefore almost a necessity.

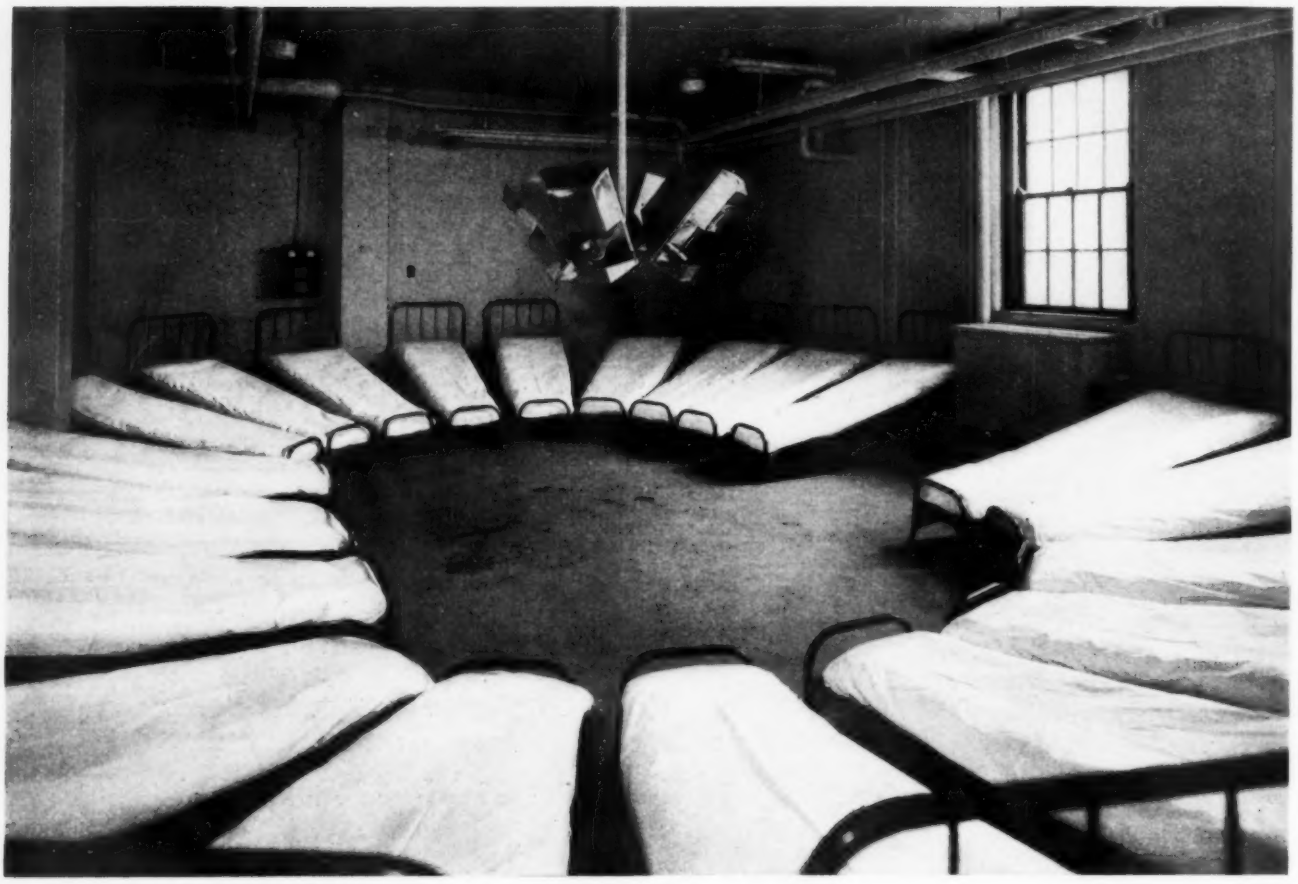
The trustees of the Cincinnati Orphan Asylum, an institution nearly a century old, felt that the care of children during their convalescing period offered a wider field for their efforts than did the care of orphans. Since this field was being ably covered by another institution, they decided to construct a building that would care for 100 convalescent children.

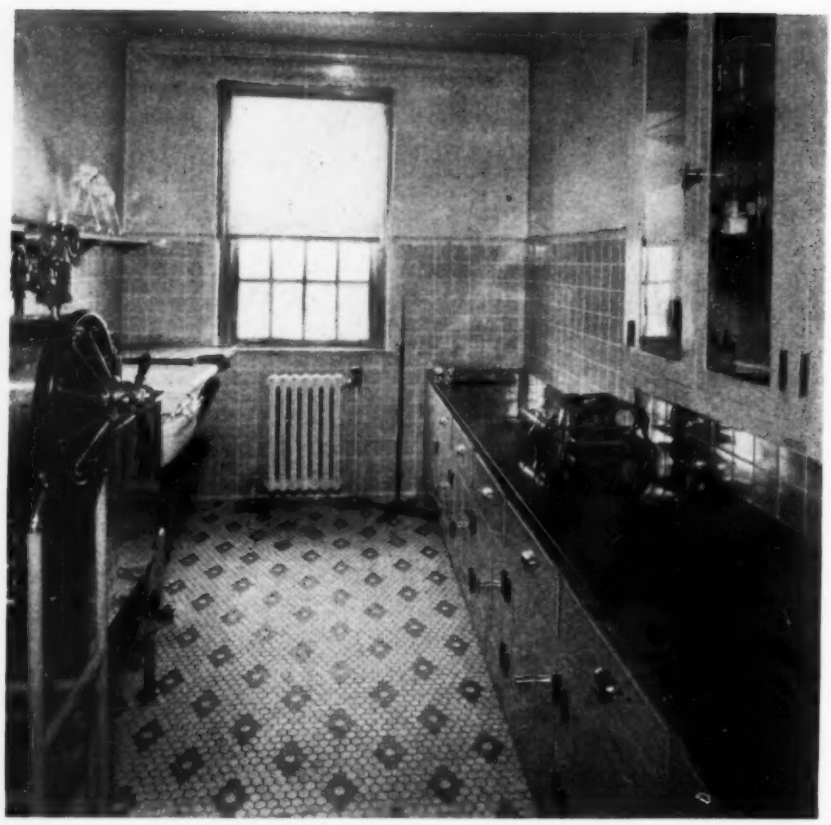
The Children's Convalescent Home is exceptionally fortunate in its location and surroundings. Situated only a short distance from the center of the city and near almost all of the hospitals, the site is of sufficient area to afford an abundance of open space. Then too, the site has been undisturbed for over fifty years and, as a result, many fine trees and plants and exceptionally fine turf add to the general beauty of the location.

The basic theory behind the plan can perhaps be best described as "an attempt to provide for the children the environment that will encourage and stimulate constructive work of educational value under the supervision of a trained personnel so that every child shall leave the institution as physically fit as possible, its health habits formed and its corrective needs cared for."

The building consists of a basement and a first story, with a second story over the central portion only. The length is approximately 267 feet with the long axis running east and west. The lot falls

The exterior of the Children's Convalescent Home, Cincinnati, is of Tudor architecture, with walls of clinker brick.





In the heliotherapy room, which is in the basement, a circular grouping of beds around the treatment lamp makes it possible for a large number of children to be treated at one time. The picture at the left shows one of the utility rooms on the first floor, in which tile walls and floor, metal cabinet tops and a built-in wall cabinet facilitate the work.

away to the east from the main entrance and also slopes toward the south, thus giving a basement that is entirely above ground along the south, east and about one-third of the north sides, with the remainder partially above ground.

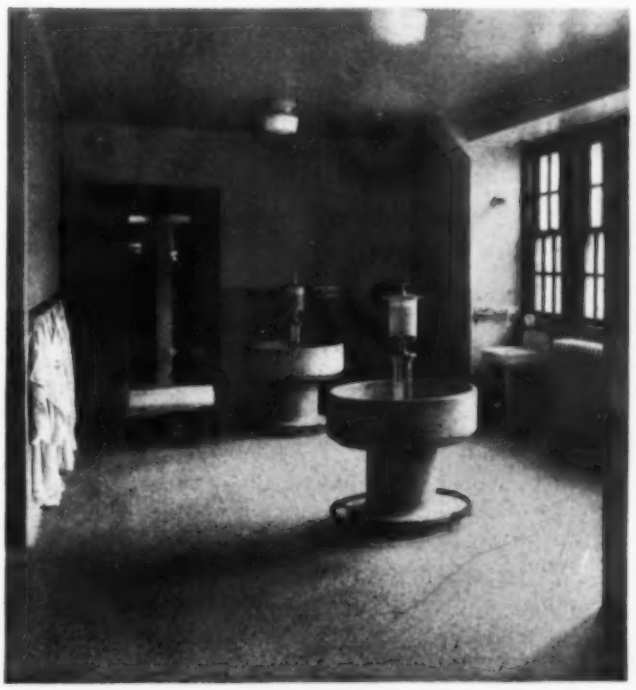
The entire central portion of the first floor is given over to reception rooms and to administration and medical and dental examination and treatment rooms. The main dining room is in the middle of the south façade. This central section on the first floor comprises the administrative and medical control center of the whole building.

The remainder of the first floor is divided into two sections, each identical with the other. A section consists of six eight-bed wards, with adjoining open terrace space, along the south side. All service dependencies, such as bathrooms, toilets and washrooms, utility rooms and supply and clothing rooms, are across the corridor along the north side. In connection with each section, there has been provided an independently serviced isolation unit of two single rooms, which in conjunction with the wards gives a bed capacity of fifty to each section or a total bed capacity of a hundred.

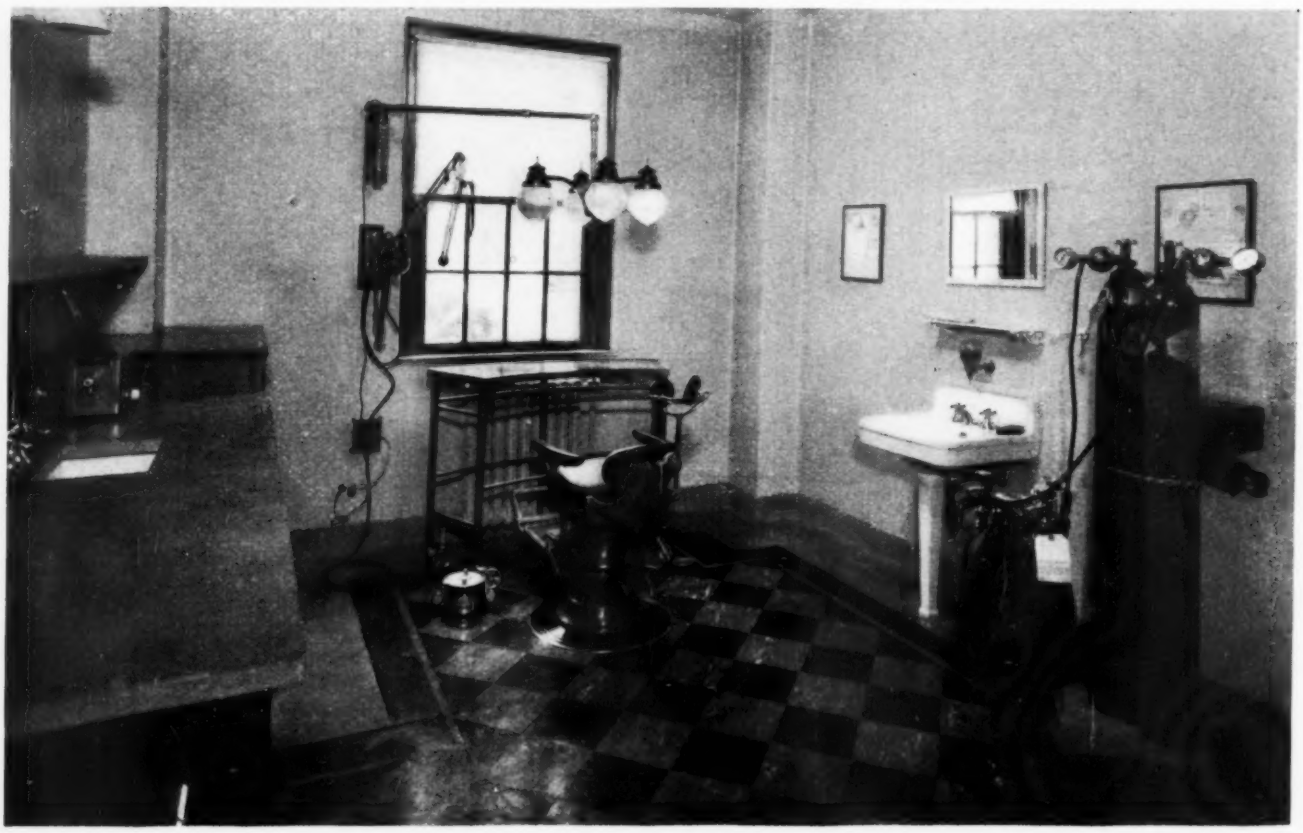
The ward partitions along the corridors and between wards are of plate glass so that visual supervision from the corridors and from the supervisor's station in the center of the building is possible.

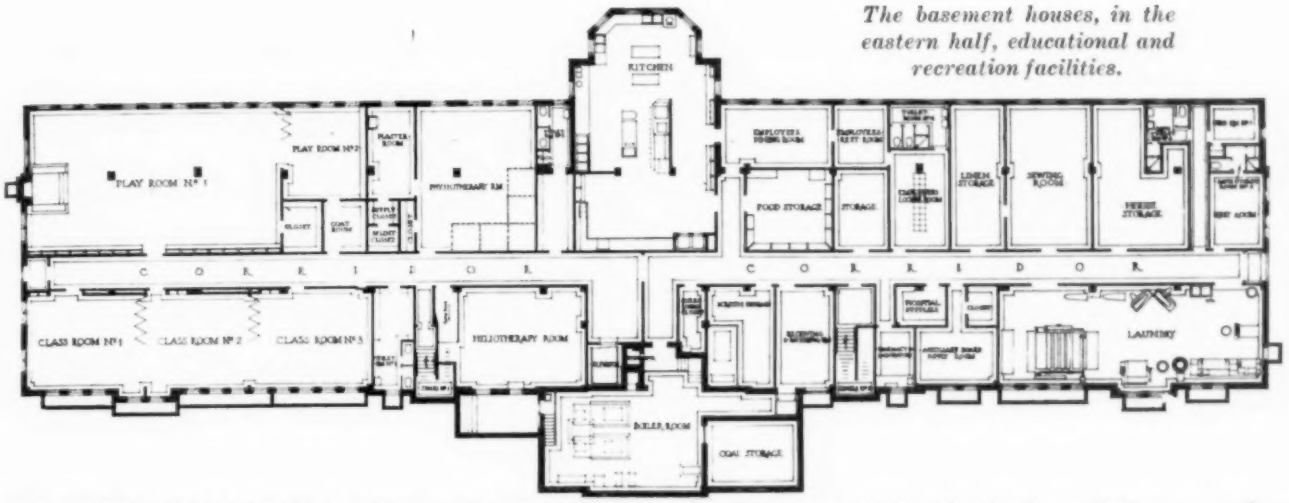
This general plan has proved extremely flexible

The many windowed main dining room is a sunny cheerful place that must certainly encourage the appetites of the young convalescents. In the lower illustration is shown a typical washroom for the children, which has a terrazzo floor and wainscot with a marble toilet and bath enclosure.



The main lobby, above, because of its furnishings and unusual ceiling treatment, has escaped the usual severe institutional look. The dental treatment room, below, is on the first floor, near the main entrance.





The basement houses, in the eastern half, educational and recreation facilities.

and readily adapts itself to almost any classification—age, sex, race or disease—desired by the administrators.

No child is admitted except from some hospital or recognized health center; therefore, all children entering this institution have been thoroughly examined and their ailments definitely diagnosed and treated until they reach the convalescent stage. This reduces the chances for contagion or cross infection to an almost negligible degree.

School Work Is Not Neglected

No surgical or x-ray work is done in this institution since it was felt this work belonged more logically to hospitals for the acutely sick. Any child requiring such services will be taken from the home to one of the near-by hospitals.

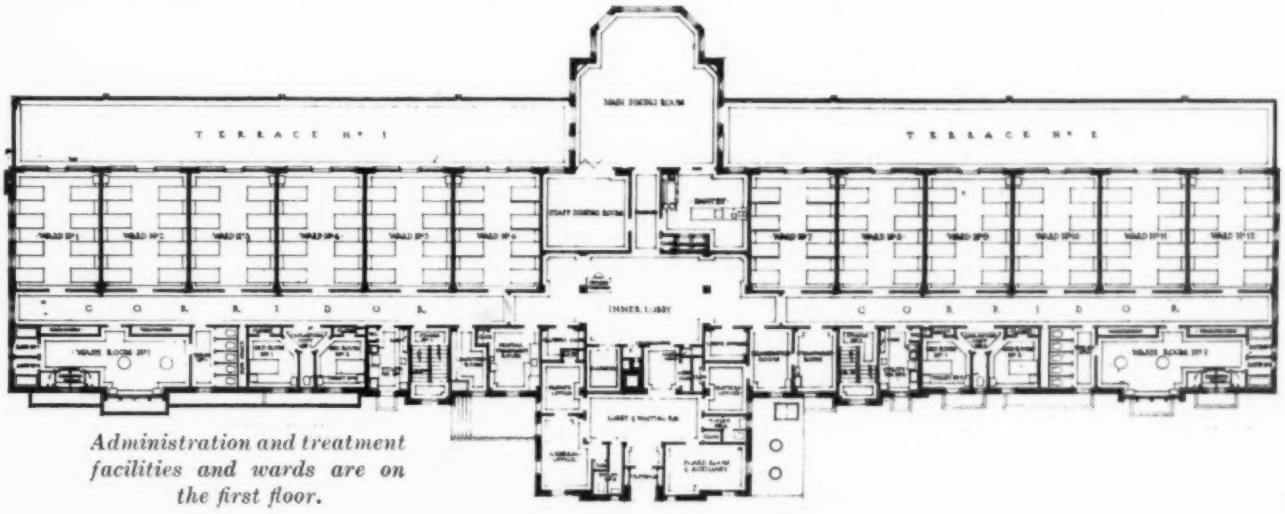
The children being convalescent are nearly all "up" cases; therefore, there is not the same heavy demand for service dependencies and nursing service as in the acute type of hospital.

The basement houses, in the eastern half, educational and recreational facilities. Along the north side of this section are three typical grade school classrooms where the children receive such instruction as their physical condition permits. The teaching personnel is furnished by the Cincinnati Board of Education. The southern portion of this section is given over to two playrooms of different sizes, and here the children enjoy many hours of healthful recreation under the sympathetic supervision of trained social workers and nurses. Every provision has been made in the way of equipment to provide a variety of entertainment to inculcate in the children a genuine spirit of play.

Near the middle of the building in the basement are the heliotherapy treatment room on the north side and the physiotherapy and corrective exercise room on the south side, where those who need it are given periodic treatments.

How the Building Is Planned

The main kitchen is in the basement immediately below the main dining room which it serves by means of automatic electric dumb-waiters. The boiler room is also in the basement. The remainder of the basement space, the entire section west of the middle, is taken up by the laundry, storage and supply rooms, a small laboratory, rooms for



Administration and treatment facilities and wards are on the first floor.

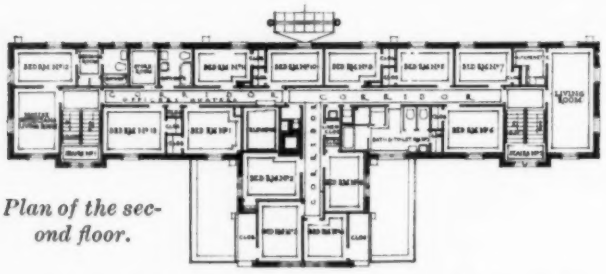
resident personnel other than nurses and meeting rooms for the board of trustees and the women's auxiliary.

The laundry is exceptionally complete in its equipment and has functioned splendidly, adequately meeting the extremes of service demands and proving its worth on many occasions.

The meeting room for the board is of exceptional interest in that it is furnished with the old pieces from the original institution and its walls are hung with the portraits of past trustees, dating back nearly a century, who seem smilingly to endorse the new undertaking of the present trustees of their old institution.

The second-story section was originally laid out for resident nursing personnel, but for the present it has been left unfinished since the present administrative scheme is predicated on all such personnel being nonresident. What the final development of this space will be has been left for future needs to determine.

In general, the choice of materials has been governed largely by usual hospital practice. Corridors and wards have rubber tile floors with base and borders of terrazzo. Baths and lavatories have terrazzo floors and wainscots with marble toilet and bath enclosures. Utility rooms, treatment rooms, kitchen and service pantries are tiled. Classrooms and playrooms have oak floors. The remaining rooms have terrazzo floors and bases



Plan of the second floor.

except certain basement rooms which are of cement. All walls and ceilings that are not of tile or terrazzo are of hard plaster painted in an eggshell finish. All cases and lockers are furred in flush with wall surfaces and set up on sanitary bases.

The exterior is of Tudor architecture with walls of clinker brick. A limited amount of limestone trim and ornament has been used but no unnecessary expenditure of money for pure effect has been made.

Through its furnishings and general color scheme, the building has escaped the usual severe "institutional" look and so far has proved to be a real "home" for the children.

The building must of course be studied in conjunction with the general administrative scheme, and to those who are interested in this matter we suggest they read the articles on this home which appeared in the September and October, 1931, numbers of the *American Journal of Nursing* which cover the administrative phase. These articles were written by Winifred Culbertson whose wide experience, tact and enthusiastic cooperation as superintendent of the home have gone far to making a success of the undertaking.

The entire project is pioneering to a great degree since there were few if any examples of this sort of building to which the architects could look for helpful suggestions. How successfully this problem has been solved only time can tell.

Arranging Flowers in the Sickroom to the Best Advantage

Glass jars of all types and sizes may be painted with a lacquer paint and made into attractive and artistic vases for flowers says an article in the *American Journal of Nursing*. This suggestion should be especially helpful for the hospital that has few vases to receive the flowers for the patients. Black and green are the most satisfactory colors for general use, says the article.

Suggestions for the pleasing arrangements of the flowers for the sickroom are also given. "Flowers should be placed in a holder one by one, with stems an inch, if possible from the bottom of the vase. The individual beauty of each flower, leaf and bud must be seen. Nothing sets a flower off as does its own foliage. The flower or branch must be placed so as to appear to be growing. All leaves below the water are removed, since they decompose.

"The height for a tall vase, the diameter for a low flat one, is measured. One and a half times this measure is a pleasing height for the arrangement. Any form of arrangement should follow the lines of the vase or basket chosen for use. The receptacle is subservient always—the flowers prominent in the design."

Hospitals Provide Special Fees for Maternity Patients

Other hospitals to join in the movement for installment payments for maternity patients are St. Luke's, Maternity and Mt. Sinai Hospitals, Cleveland. The maximum payment, covering prenatal care, delivery and two weeks' hospital care, is $55. The payments are $2 a week for six months.

Expensive Bargains and How to Avoid Them

By JOHN A. McNAMARA
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Chicago

NEVER in the history of hospitals in this country has it been more important for the superintendent to apply the strictest of business methods to the administration of the institution than it is at the present time. Economy has been the watchword for the past year or more, and while occupancy has not been appreciably lowered on the average, there is no denying the fact that there has been a shift in the type of accommodations that are used.

Less income means a closer buying of all materials; yet every precaution should be taken to see that at no time should the standard of equipment and supplies in the hospital fall below the point where the safety or comfort of the patient shall be endangered. Those superintendents who are investigating every piece of equipment that is offered to them for sale are to be commended, but it is time for a note of warning to be sounded.

The unscrupulous seller is abroad. Finding business poor in other fields, many manufacturers who have never sold to hospitals before have turned to this industry as the dumping ground for shoddy goods. The bargain hunters are their prey.

Buying in Haste—

Instance after instance has been reported when the hospital has purchased apparently trustworthy goods at a reduction under standard price, only to find that they have been victimized and they have no recourse because the seller was not a responsible party. The temptation to the hospital buyer to snap up any bargain offered without waiting to investigate either the goods or the house selling them has been great, and in every case the repentance has come at leisure.

Linen of inferior quality, yet perhaps looking as good or better than the best, faulty rubber goods bought from houses that were not responsible, so called bankrupt stocks which were in reality simply poor quality or previously rejected goods, food trucks and other conveyance material that could not possibly stand the hard usage of hospitals, thermometers of the cheap and untested variety, heavy and expensive pieces of machinery sold with elaborate claims but without reputation for performance, articles of food where the best quality has been sacrificed for price, and many other instances, have been reported by hospitals themselves.

Tests That Mean Saving Money

There are plenty of ways by which the superintendent can and should test everything that he buys. Supply, equipment and food houses who for a number of years have served the hospital field satisfactorily, guarantees that are actually worth something, standard goods that have stood the hard usage of institutional demands and the genuine spirit of cooperation that the better class of manufacturers manifest, should all be contributing factors in purchasing. Price, of course, should be considered, but only on standard quality and fully guaranteed goods.

In an effort to save money for all the hospitals of the country, THE MODERN HOSPITAL has made a survey and herewith presents not only specific cases where superintendents have been the losers by buying poor quality goods that were offered for less money but the remedy in future buying of many commodities, as well as tests and standards that have been worked out for many items that are of common use in every hospital.

The purchase of hospital linens is one of the largest items of constantly recurring expenditures. In order that these purchases may be made intelligently, the superintendent must take many factors into consideration. Low initial price is not an indication of economy unless probable length of service is proportional to the service of the higher priced article. Nor is this all, for another consideration lies in determining the relative performance of the lower priced article. Supplies that fall slightly below necessary standards may cause a great loss by lowering the efficiency of the hospital staff.

Because of this the superintendent will do well to consider the ultimate economy and efficiency of the hospital as well as immediate savings.

As an example, the radical reduction in the price of garments usually means poor materials, scanty cutting and poor workmanship. The resulting discomfort to the hospital staff, although slight, is bound to be reflected in many ways that cost the hospital more than is saved by the purchase of low priced, poor quality materials. The loss caused in this way cannot be actually calculated because it is one of the intangibles that are reflected only in the yearly financial statement and general report. However, the actually added expense of poor quality can be traced easily in any good accounting system. It may be found, for example, that a greater number of linen replacements are necessary than with the better grades, and the loss may be consequently stopped. To avoid further mistakes of a similar nature, standards may be set for the testing of materials and workmanship.

A suggested series of tests for nurses' uniforms is given here:

1. Laundry tests of from five to ten actual trips through the hospital laundry to determine the amount of shrinkage and color fastness. Allow ½ to 1 inch variation in length when mangle is used for pressing. The same soap and procedure should be used to avoid variations in tests.
2. Study the garment to discover reinforcements at points of greatest strain.
3. Count stitches to the inch on all seams, with a standard of 16 to the inch.
4. Ascertain brand of uniform cloth used and apply tests.

A test for collars and cuffs is as follows:

1. Count the number of plys used in construction and the number of threads to the inch of the cloth used for fronts.
2. Test for ease of starching and ironing in the hospital laundry.

This test may be used for aprons and bibs:

1. Test for weight and finish of material.
2. Test for stitches on all seams.

Laundering Is Important Consideration

Another example of lowered price that is partly due to a decline in the cotton market, but largely due to the changing of specified size, is found in the price of maternity pads.

Smaller pads may cost less, but any saving might be counteracted by the fact that more of them may be demanded in the care of the patient. In this instance it seems logical that economies should be based on service first, and that the hospital buyer should have the cooperation and advice of his medical staff before he issues his requisitions.

Quality merchandise may be purchased, and yet be unsatisfactory for its purpose. A further consideration which must be given to the question of quality is the laundering of textiles. In certain parts of the country the hospitals cannot use heavy grade qualities because their laundry facilities and water will not permit them to use these better grades. The heavy textiles turn grey in color, and present an unpleasing appearance. This condition has been met by the use of lighter weight materials which can be successfully laundered. In these cases esthetics and patient psychology justify the use of light weight materials regardless of expense.

Selecting Cleaning Materials

It would be folly to buy heavy grade textiles, and then, to keep them white, to use an excessively strong bleach that would destroy the strength of the material. In this connection here is a suggested test for too much bleach: If the marking of a good quality ink fades to a light brown, enough bleach is being used to destroy the fabric.

When the hospital pays for long service by the purchase of good quality textiles, this service should be guarded in all departments by the proper maintenance procedure and materials.

As to rubber sheets and sheeting the actual cost of a single sheet is not great; yet a faulty product may cause considerable expense, not only through poor wear but through actual damage to other materials. As a case in point, "One of the most striking examples of trouble and expense from bad judgment in buying is an experience an Indiana hospital had with rubber sheeting. Not only was the sheeting lacking in normal quality, but it had a peculiar vice which was responsible for the hospital's losing quite a number of good sheets and mattresses. The sheeting in question did not have a permanent color. It was short-lived, and in addition it destroyed articles with which it came in contact."

There are two sets of standards for rubber sheets and sheeting that are recognized—the Rubber Manufacturers' and the Federal. Of these the Federal specifications are more rigid. The Government prints these specifications for rubber sheeting in a folder known as "ZZ-S-311," copies of which may be obtained from the Department of Documents at Washington, D. C.

Cleaning powders and soaps are other items of universal and continuous application throughout the hospital. As safeguards to health and sanitation, their cleansing properties must be maintained regardless of cost. Low priced cleaning powder and soap may seem as effective as a higher priced variety, but a close examination of the washed articles and a check of the time spent in

cleaning may show filmy surfaces and wasted effort due to poor cleansing properties. The injury caused to textiles, floors, paint and equipment alone may show a greater final expense than the savings achieved in first cost, and the extra labor involved may add enormously to the expense of maintenance.

In the case of one hospital, dishes and glassware came from the dishwashing machine with a seemingly clean surface, but on careful observation a film was discovered over the entire surface. Periodically these dishes had to be scoured with a harsh abrasive to remove this hardened film. This added handling increased the hazard of dish breakage about 30 per cent.

A good general principle to follow in the selection of cleaning materials is to follow the recommendation of the manufacturer of the equipment to be cleaned. The manufacturer is anxious to have the hospital obtain the greatest service possible from his product, and for this purpose he has made experiments to determine the best cleaning methods and materials.

As an example of how the manufacturer is trying to help the hospital to reduce maintenance and replacement, the following is quoted:

"One hospital for which we supplied a considerable quantity of rubber tile flooring not long ago, persistently refused to maintain the floors in accordance with our instructions and suggestions. This hospital is using cleaning materials which we know are in time going to be injurious to the floors and, although they have been told about this matter and have been put in touch with the proper firms to supply them with correct cleaning materials, they still refuse to maintain the floors properly. In our business a matter of this kind is important, and no doubt a considerable quantity of flooring materials has been ruined or at least severely damaged by improper care."

That the reputable manufacturer is more than casually interested and will exert himself to provide information on the subject of maintaining his product is certainly indicated by this attitude.

Guarding Against Misrepresentation

Paper and paper products are comparatively simple to judge for quality, although fine discrimination requires experience. The danger, when an abnormally low price has been submitted, lies in short weight and short counting. This sort of business chicanery is not prevalent, but firms that consistently undersell and have little reputation often indulge in this practice. A quick method of checking short count is to weigh a definite number of quires of paper or other articles, and then ascertain the total weight of the shipment. The count may then be calculated which will give a close approximation to the number actually received.

The mere outward appearance and imitation of the mechanical features of instruments and machines do not guarantee their performance. Instruments should be tested for proper tempering, and riveting. The plating and painting of cheap products often are used to cover up inherent defects in the material or manufacture.

There have been several cases where hospitals purchased a cheap electric breast pump that resembled a successful machine. The cheaper machine had but a slightly lower first cost, but the final cost made it an extremely expensive machine. This apparatus did not obviate breast infections while maintenance of the machine required the supervision of a mechanic. The other machine avoided both these pitfalls.

Misrepresentation of the capacity of instruments is also to be guarded against.

Why Reputable Firms Should Be Patronized

Purchasing standard articles at lower prices is the objective desired by every hospital executive who is keen to recognize the economies of lower costs. It is, however, the poor quality and service given by cheap supplies that the hospital must guard against. Prices may be considered as legitimately lowered when quality is maintained.

The selection of proper silverware depends on how constantly the silver is used and what provisions are available for its washing and care. The tests for determining the quality of silverware are involved and require a considerable technical skill. Also, that which might be perfectly suitable for one type of hospital might not be at all suitable for a larger institution where the silver presumably gets a lot more and harder usage.

The best and broadest specifications under which silverware is purchased are those prepared by the Navy Department under date of 1927—"Silverware Specifications No. 62-S-3." These may be procured upon application to the Bureau of Supplies and Accounts, Navy Department, Washington, D. C.

This silverware used by the Navy Department is of course of high grade, but there is a lot of silverware available that would not come up to these specifications but that would still be perfectly suitable for hospitals and institutions of a certain type.

The advantages of buying supplies from a responsible firm with a reputation for integrity is illustrated by the following instance: A hospital had been using some chart holders for over a year when the strips on the bottom of several of the holders came loose. Whatever the cause of this

mishap, whether mistreatment or faulty workmanship, these holders were replaced without charge. The result of this experience has been to improve the holder by better and more substantial construction, although the first type of holder had given satisfactory service in other institutions for over three years.

Service like this is not and cannot be given by manufacturers of shoddy, low priced material. They are not interested in the real value of the product, but only in the immediate sale and profit to them. It is this type of manufacturer and merchandise that hospitals should avoid in this period of price cutting and readjustment.

The superintendent, intelligent and economical in his purchase of supplies and equipment, may have difficulty in following his better judgment if trustees and committees are overzealous in selecting the goods to be purchased. A number of instances of this kind have occurred that have resulted in a considerable loss to the hospital.

The Problem of Overthrifty Boards

A prominent woman persuaded a committee to buy a lot of cribs because she liked the pink paint. At another hospital, beds were purchased because the color of the sample bed harmonized with the walls of the display room. This type of superficial judgment may cause a considerable loss when substantial construction is overlooked. An example of misguided thrift was displayed by a committee of women after they had worked hard to raise funds for a hospital. A department store had a special sale of pillows and the committee purchased them. The money was entirely wasted because the pillows were of the poorest type and totally unfit for hospital use. This type of error should not occur, and more than ever emphasizes the need for limiting purchasing power to someone with experience along these lines.

In the purchase of inner spring mattresses or upholstered furniture, one must rely almost entirely upon the integrity of the manufacturer. Here the skilled workmanship and substantial construction desired are hidden beneath the covering material. A large selection in materials used allows a wide range in the price of the finished article, but one may be assured that there is also a wide range in quality.

The hospital crib and bed must be substantially built to withstand strains that would soon ruin the ordinary commercial beds. A New York hospital purchased such a commercial type of beds within the last two years, and these beds have gone to pieces completely under the service required of them.

That the outward appearance of similarity is not a criterion of value is just as true of cribs and beds as of bedding. A crib of good design and substantial construction has for some time been produced by a number of manufacturers. Recently a crib similar in appearance but lower in price was offered to hospitals at what seemed to be a considerable saving. A comparison of the construction of the two cribs, however, showed the poor quality of the cheaper crib. The lower cost was achieved by the use of a lighter weight material, smaller cross rods and filling rods, riveted instead of welded construction, cheap stampings instead of malleable iron castings, nickel plated instead of stainless steel rods and mashed pieces of tubing instead of solid metal. This material and construction were supposed to be as good, although slightly different, as that used in the higher priced crib.

To contrast in the same way the ordinary commercial bed with one designed especially for hospital use: "The posts, fillers and cross rods of such commercial beds are ordinarily made of such light wall tubing that they cannot stand the constant moving to which such beds are usually subject, or the strains and twists that are always set up when extension stems, blocks or even Gatch or Fowler springs are used. The beds (commercial) have not only broken loose at the insecurely welded joints, but have in many instances cracked the light wall tubing in the fillers and cross rods to such an extent that any strength the bed originally had has been entirely nullified. Then in addition to the lack of strength in such light wall tubing is the fact that it is utterly impossible to make the type of weld necessary for a strong rigid joint when there is used tubing that will not stand the excessive heat set up by such a welding process. On the other hand, heavy wall tubing such as should be used in hospital work can be perfectly welded and fabricated to make a substantial bed that will really give the service to be expected from such a piece of furniture."

A Specific Example of Poor Economy

That this same shoddy type of construction is not limited to beds is illustrated by the experience of another New York hospital. A food conveyor had given good service in the institution for two years, when it was decided to add to the equipment. A conveyor that looked similar, but that was not of the same make was purchased because it was cheaper. Within four months this conveyor had actually fallen apart.

Upon investigation by competent engineers it was found that the construction of the cheaper conveyor showed a lack of sound engineering principles and little knowledge in the handling of stainless steels. "It was revealed that the entire cabinet

had been bolted together without a reinforcing gusset. The framework was not rigid and was held together by undersize bolts on which not a lock washer was used. In moving the conveyor over uneven floors, there was much racking of the framework, and it was impossible to keep the bolts drawn up tight. A piano hinge was supplied on the doors as specified, but the hinge was far too light to support a door of the weight and size specified. The doors were constantly falling off and being replaced by the hospital repair department. Push handle brackets were weak and improperly designed, as was true of the shelf braces, latches and other attachments."

In this case the letter of the specifications were lived up to, but the results desired were not obtained because—a generous interpretation—the manufacturer had an insufficient knowledge of the strength of materials or their proper fabrication. The hospital had no recourse to the manufacturer because specifications had been met.

Short-Sighted Policies to Be Avoided

To illustrate the short-sightedness of the "price" policy, a concrete example in food slicers may be cited:

The cheap food slicer at an average price of $200 will only last approximately five years. This means $40 a year depreciation charge. A quality slicing machine at $325 is good for ten years, or a depreciation of $32.50 a year. A cheap machine cannot possibly have all the features of the better quality machine. Take for example the time of cleaning. The cheap machine will require at least twenty minutes of an operator's time, which we will figure at thirty cents an hour giving the cleaning cost of ten cents a day. The quality machine may be cleaned just as well in five minutes or at a cost of two and a half cents a day. As can quickly be seen, this would prove that a "cheap" slicing machine is more expensive than a quality machine, if it is purchased on a ten-year basis, as it should be in a hospital.

In the selection and purchase of building materials and equipment that are permanently installed, great care should be exercised. Here, not only will the unsatisfactory item have to be replaced, but many parts of the structure may have to be removed and redesigned before the new equipment can be accommodated. More than ever will the reputation of the manufacturer and contractor have to be considered and a history of satisfactory performance shown. To buy cheap materials means to court disaster, but to buy service at a low price means efficiency and real saving. If bids are taken on a competitive basis, and an "or equal" clause is included in the specifications, be sure that the substituted material really is equal. Tests, such as are made by the Underwriters' Laboratory and United States Bureau of Standards, and inquiries into performance will provide a guide to the desirability of accepting such materials.

There has been a tendency on the part of some of the larger construction companies to refuse to estimate under a competitive system because best results cannot be obtained. There are many ways to combat shoddy and unsatisfactory work and this is one solution.

In competitive bidding, when the lowest price is accepted regardless of the responsibility of the contractor, it is impossible to obtain desired results. No architect or clerk-of-the-works can possibly check all materials and workmanship that go into a building. Without the adequate financial support of the owner it is impossible for the architect to make the contractor even follow the letter of the specifications, not to mention the spirit which produces good building.

In the present chaos of price decline and readjustment it is extremely difficult to judge which figure is based on good workmanship and materials. This means that a careful analysis of all factors is needed now more than ever before. Judgment must be based on past performance, financial responsibility and the integrity of the contractor and manufacturer. The following analysis of some of the items used in building may form a guide and indicate a direction for investigation:

When Regrets Are Futile

Plumbing is one of the most important items of mechanical equipment in the hospital. An instance of expense and inconvenience that occurred illustrates the folly of installing plumbing of an unknown make and quality. A hospital building was scarcely two years old; yet a large number of replacement parts were required. The fixtures had no manufacturer's trade mark, which made it impossible to obtain new parts or replace any fixtures. Considerable expense was entailed, because it was necessary to break into the wall in order to change the waste piping to fit new fixtures of standard dimensions. To have repaired the original fixtures would have meant making new parts to special order at an expense out of all proportion to value, and the old unsatisfactory fixture would have still been retained. If the cost of the first installation and its maintenance and repair had been calculated, it would have been found that good plumbing fixtures cost less than "cheap" ones.

A doubtful practice has been to include sterilizers and stills in the plumbing contract. The danger of this is obvious. The plumber "shops

around" for the cheapest thing he can possibly hope to get approved, and he works diligently for the approval of the cheap thing because it means money in his own pocket. A separate specification on equipment would help to obtain fair competitive figures on goods of approximately equal quality.

In the construction of one hospital, the sterilizers were specified in the plumbing contract. Considerable trouble occurred because price was the entire basis for judgment. After the award, the manufacturer and plumber tried to make up for the low bid by omitting automatic pressure controls, pilot lights and even an entire sterilizing unit. Three sections of the unit were built in and practically complete before the omissions were discovered. The question of who should pay for the necessary extra work and equipment arose. Luckily the specifications clearly stated the amount of equipment required, and the hospital did not have to meet the expense, but the delay and waste of time in negotiations were an expense to the hospital. In practically every case where an excessively low bid is accepted trouble follows; nor is it always settled happily for the hospital.

Cheap water distilling equipment cannot fulfill the real function of water distillation apparatus. If the prices quoted are far below those quoted by established manufacturers, there is a reason for suspicion, and, if possible, it would be wise to test the quality of the distillate produced by this machine. It also should be obvious to hospital purchasing agents that when iron, steel and other materials that have a tendency toward quick corrosion are employed, the life of the equipment will be shorter than any product fabricated entirely of corrosion resistant materials such as copper, bronze, brass or nickel alloys. Pure block tin, moreover, is universally acknowledged as ideal for distilled water contact, and high grade water distilling equipment is lined with pure block tin. The best protection in the purchase of distilling equipment is the inspection of previous installations and tests of the distillate.

Criteria for Judging Dishwashing Machines

Nickel alloy metals and stainless steels have almost become standard for dishwashing machinery. The metals with a high copper content are less noisy, and the stainless steels are easier to keep clean. The rapidity of cleaning, the amount of water and cleaning powder needed and the delivery of absolutely clean dishes, glasses and silverware are the criteria upon which to judge the machines. Valves and waste pipes should be examined for capacity, minimum wear and ease of replacement. The question of a washer's being adapted to handle dishes, glasses and silverware successfully should be carefully considered. Not all washers are designed to handle all types of tableware.

Incinerators must be built to withstand extremely hard usage. This includes not only the grates and incinerator fittings and hopper doors, but also the fire brick used in the construction. The two parts most important in the life of the incinerator are the grates and fire brick lining. Not only should the best of materials be used for incinerator parts, but it might be well to obtain a certificate of analysis of the fire brick from a reliable testing company.

The hospital requires specialized lighting fixtures, and the greatest mistake made is to purchase the standard type manufactured for store and office use. A good lighting fixture can be cheaply imitated, and there are many examples of high costs in excessive maintenance and in personal hazards experienced by hospitals in which inferior lighting fixtures have been installed.

A Suggested Standard for Lighting Fixtures

Here is a suggested standard for lighting fixtures in hospitals:

All lights in hazardous locations shall be of the vaporproof and shockproof type.

All fixtures shall be made of brass or bronze of the following formula: Brass shall have copper 71 per cent, zinc 24 per cent, tin 2 per cent and lead 3 per cent; bronze shall have copper 58 per cent, manganese .25 per cent, tin 10.5 per cent, lead 3.25 per cent and iron .05 per cent.

Casting shall be French sand.

Spinning shall be not less than 22 gauge.

Tubing shall be not less than 17 gauge.

Casing shall be not less than 24 gauge.

Chain shall be solid brass, not less than No. 5 gauge.

Sockets shall be of standard make, and shall be of one and the same manufacture.

Wire shall be No. 14 gauge asbestos covered.

Globe holders shall be of the safety screwless type.

Glassware shall be of uniform quality, and free from imperfections.

The Commonwealth of Pennsylvania has made up a set of standards for hospital and institutional lighting fixtures, written in specification form, from which the foregoing outline was taken.

Emergency lighting should offer the hospital protection twenty-four hours a day and every day. Yet a hospital has tried to save money by using a cheap storage battery, and an automobile spotlight mounted on an adjustable standard to supply this protection. Not only is this equipment unsuitable because of inferior workmanship, but,

more important, it offers no positive assurance that it will be in operating condition when the emergency arises. Since the lamp is not in use every day the routine of checking and recharging the battery may be neglected. When recharging is necessary a duplicate set of batteries must be substituted or the hospital has no emergency system for twenty-four hours. The standard equipment is supplied with a trickle charger that maintains the battery in proper working condition. If a hospital is to have an emergency system it should function without interruption.

The hospital door is a unique problem due to the fact that an unusually wide flush type door is required. It is difficult to manufacture and requires the use of specifically high quality woods, as well as fine workmanship. The wood used must be specially selected and prepared to be used in this type of door. Cheap doors are likely to warp, twist and develop loose veneers. When heat is turned on in the building, the cores of the doors will gradually dry out until every core strip is shrunk to its limit of contraction. In this shrinking, the surface veneers have been pulled, and an irregularly corrugated surface, "washboard" effect, appears.

A door cannot be judged by its surface alone. Cheap hospital doors are cheap because usually odd cuttings from other work have been used to make the cores, and little care has been exercised in kiln drying the material and in obtaining an absolutely smooth surface after all shrinkage has taken place. This takes time and patient watchfulness because no two pieces of wood react to moisture uniformly. It would be better to buy well in the beginning than to have expensive replacements or a dilapidated building a year after its erection.

What happened in the case of a storage rack manufacturer illustrates exactly the type of purchasing to be avoided. As a subcontractor he submitted figures on equipment that filled both the letter and the spirit of the specifications. Other contractors were called in and were asked what could be done to cut the price and still follow the specifications. In the end, half the original price was quoted as the greatest amount of money needed for the racks. The contract was let on this basis. What were the results? A storage rack was installed that had only half the capacity of the refrigerator. Refrigerator space that is cooled for no purpose means a continuous waste of money over years that will amount to many times the first cost of correct installation.

Another type of "shopping around" that did not end as disastrously for the hospital was experienced by a manufacturer of metal products. An open alternate clause in the specifications and "thrifty" owners caused the trouble. After the contract had been awarded the owners listened to another concern that claimed several thousand dollars could be saved if their product was used. The architect was not satisfied, and he made a careful cost analysis that proved the claims false. The owners would have been liable for several thousand in "extras" if the change had been made. That thorough investigation should be made, not only of the product itself but of all the requirements for its installation, is obvious. It is here that the architect is the best guide as to the procedure.

How the Hospital May Protect Itself

Precautions necessary to protect the hospital against inferior quality in supplies and equipment may be summarized as follows:

Establish standards for specifying supplies, equipment and building materials.

Make use of all possible testing services. These may be the U. S. Government, Bureau of Standards; the Underwriters' Laboratory; commercial testing laboratories and Manufacturers' Association Standards. Recommendation from these sources may not always be applicable to the hospital, but will form something of a guide to purchases.

Get financial reports from commercial agencies.

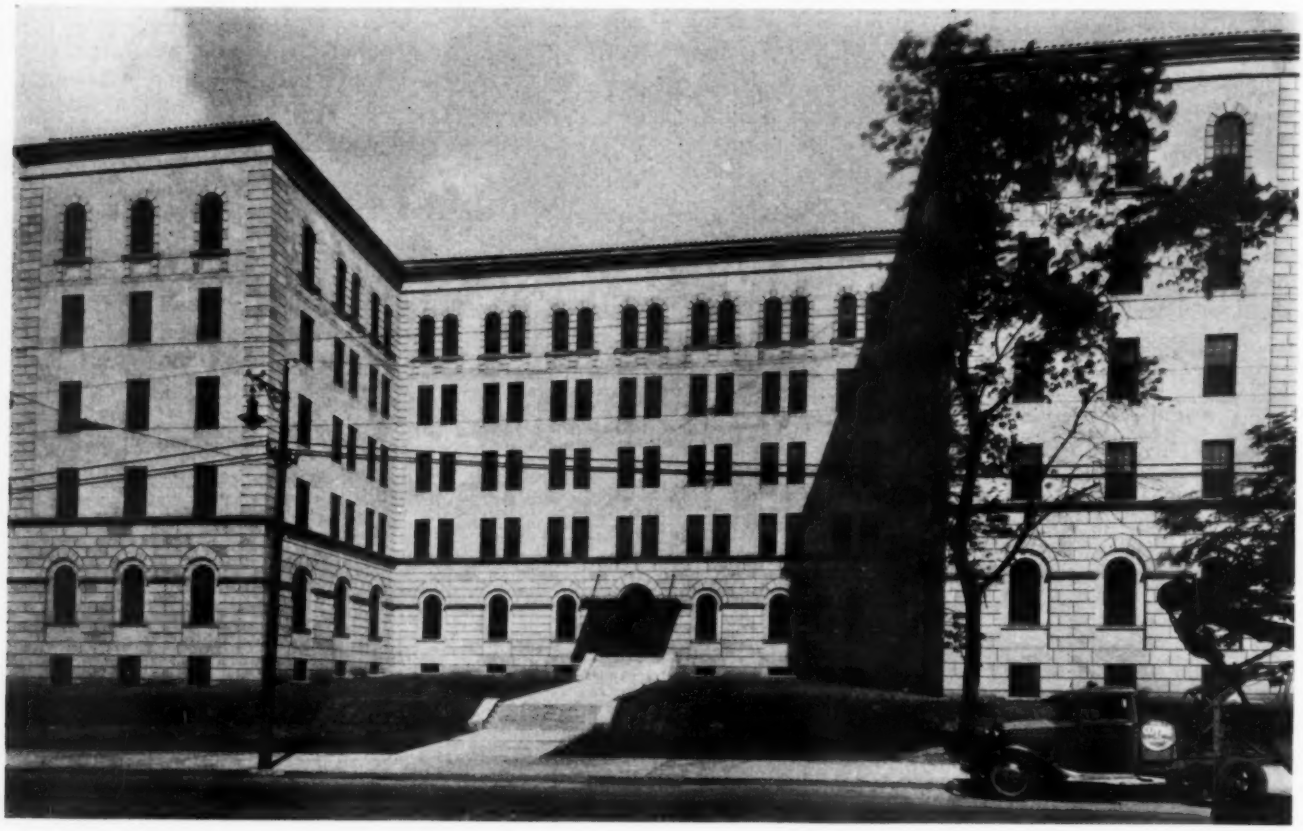
Demand guarantees, and see that they protect the hospital on both installation and service. And be sure that the manufacturer or contractor is both financially sound and responsible so that if trouble develops he will be able to repair or replace the worn out equipment.

Do not select supplies or equipment from photographs or blue prints, but demand a full size sample or demonstration. When impossible to submit samples, demand instances of installations that have survived service and investigate them.

Because a manufacturer has one good product, do not think that a cheaper article of his manufacture has proportional or equal value. It may be totally unfit for hospital use.

Who shall be the judge of value? Certainly the superintendent, architect and consultant have greater experience than those not definitely connected with the hospital, and certainly they have more interest in the successful construction and management of the hospital than the salesman or contractor hired on a competitive basis.

The hospital's financial resources and satisfactory service must be protected against the economic waste that naturally follows the purchase of supplies, equipment or building materials of inferior quality.



The University of Pittsburgh's New Teaching Clinic

By W. L. SMITH
Associate, E. P. Mellon, Architects, Pittsburgh, and
MICHAEL M. DAVIS
Consultant, Chicago

THE Falk Clinic, the new teaching institution for the medical school of the University of Pittsburgh was assured five years ago by a generous pledge from Maurice and Leon Falk. The university had had the advantage of an affiliation with the Pittsburgh Free Dispensary, an independent organization, but its building was antiquated and much too small for the demands of a modern teaching clinic.

The new site of the Presbyterian Hospital and other in-patient units for the clinical work of the medical school is on a fine piece of ground on Fifth Avenue, rising in the typically hilly Pittsburgh fashion to a commanding eminence on which the medical school building stands. The Presbyterian Hospital is located on the next level; farther down the Children's Hospital of Pittsburgh, also affiliated with the university, has been established for some years.

It was determined to build the new clinic on the Fifth Avenue frontage of the property, a position which would make it most accessible to patients and staff and at the same time place it near the hospitals. The conditions of the ground and other local considerations made it impossible to build an out-patient department which would be physically part of the affiliated hospitals. As a result, various advantages had to be foregone, such as a unit record system, interrelated laboratories, one x-ray department for in-patient and out-patient use, a unified pharmacy and other affiliations or structural consolidations. The clinic building had to be planned as a self-contained though affiliated unit.

Considerations of present and future needs led

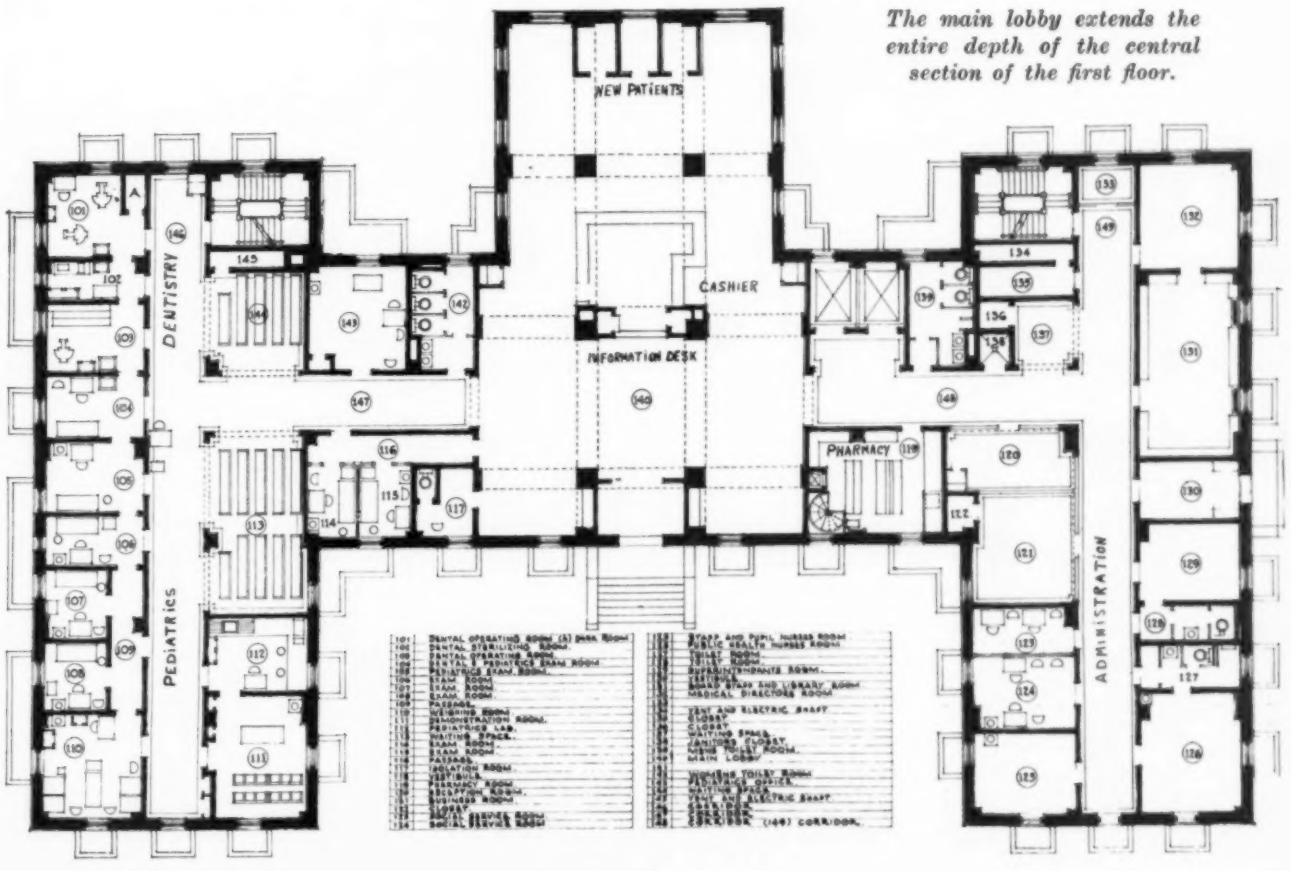
to the decision to construct a building of five stories and basement with an area of 11,000 square feet on the typical floor and an approximate total cubage of 1,020,036 cubic feet. Located near a street corner, with ample setback and surrounded on the other two sides by university property, the building is assured light and air on every side, even in the basement. A modified H floor plan was adopted, conformable to the conditions of the site and advantageous for an out-patient service, providing as it does, a convenient central point for the reception and distribution of patients.

The outline of the building and various details are shown on the plans of three floors accompanying this article. The lobby on the first floor extends back about sixteen feet beyond the upper floors in order to provide room for the admission of patients. The scheme of the building may be best explained from the standpoint of those interested in out-patient administration by following the trail the patient would travel.

The ground levels require eight steps outside the main entrance. The patient then enters, through a vestibule, a hall 38 feet wide by 60 feet long—the entire depth of this section of the building. Fifteen feet from the entrance is the information desk, between two supporting columns. The information desk which is part of the working enclosure is of Tavernelle clair marble with a verd antique marble base. A wide counter shelf around the working enclosure provides ample space under it for files. The cashier's cage, to the right of the entrance, is a bronze and glass grille and wicket. The floor of this admitting hall is of terrazzo paneled and bordered with verd antique marble strips, similar to the base. The plaster walls above the Tavernelle marble are painted a soft buff color and the room ceiling is ornamented with run plastered moldings. The room has nine large round arched windows which provide excellent light and natural ventilation. The lighting fixtures are in wrought iron of an early Italian design.

The new patient goes first to the information desk. He is sent from there to the left and rear of the hall where benches and chairs are arranged for the convenience of waiting patients. When summoned for the initial admitting inquiry, he goes to one of the three admitting booths shown at the rear of this hall. After the patient's admission has been determined and his fee rate fixed, he passes along the right side of the railed space, occupied by the admitting desks, cashier's desk and the alphabetical index. He will stop at the cashier's desk long enough to pay his fee, obtain his receipt and then go to the elevator.

The old patient may, without stopping at the admission desks, go directly to the cashier's desk,



The main lobby extends the entire depth of the central section of the first floor.

approaching it from the opposite side to the new patient. The two streams of patients will join and move together toward the elevator. With the exception of the pediatric clinic, which is in the left wing on the main floor, all of the clinics are upstairs, so that all patients except those assigned to the pediatric clinic will go to the elevator. This is the only cross traffic which will be necessary in the main hall.

Special Attention Given to Record Rooms

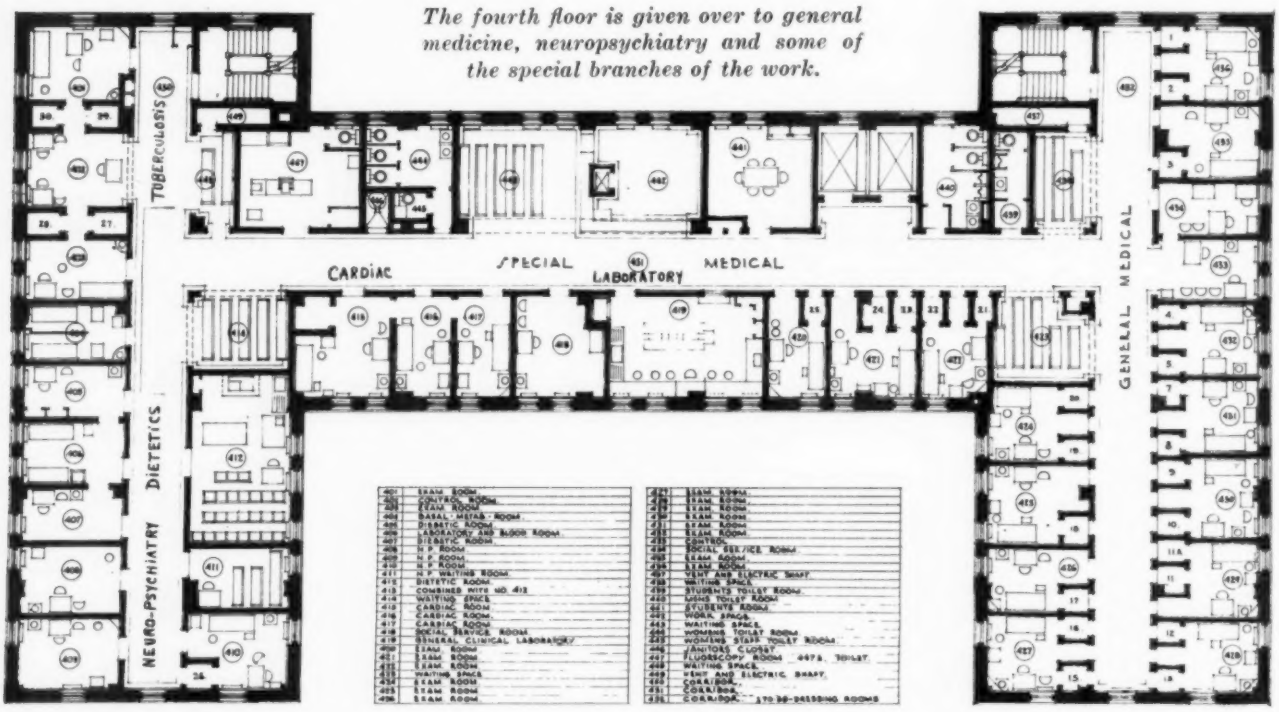
The information, cashier's and admitting desks' space is connected with the main record room, which extends across the entire central portion of the basement, by a vertical conveyor, electrically operated, which runs up to every floor. A telautograph memorandum is made by one of the clerks in the central admitting space of each record desired from the record room. This is reproduced by the telautograph in the record room so that the proper record can be promptly brought out and sent to the desired floor. Distributions of records on each floor will be by an assigned member of the employed staff.

The pharmacy and its dispensing window are on the main floor opposite the elevators, convenient to the outgoing flow of traffic, enabling this stream to leave the building without crossing other main traffic lines. The record rooms in the basement provide space for filing cabinets which will hold more than 100,000 clinical records of average size. Working space is furnished for the clerks for filing and indexing and for physicians to work studying and checking records. The diagnostic index will be in the basement, but the alphabetical index, which is of constant use during admission of patients, is around the counter on the main floor.

The main floor has space for business, administrative, nursing and social service offices. A handsomely furnished room will serve for a staff library and for committee meetings. In the southeast corner is a large room where the public health nurses of the community may have branch headquarters for their service in the district and their cooperative work in the clinic. On the same floor is a dental clinic with three chairs. A separate room provides space for extracting and minor oral surgery; the other dental room is for prophylaxis and some reparative service. A small dental laboratory and dark booth for viewing films is provided for the dental unit.

The pediatric unit, also on the main floor, includes six offices or examining rooms, two cubicles and two large rooms, designed for the weighing and examination of babies and talks or demonstrations to mothers. A small isolation room with its own toilet adjoins the admitting hall for the temporary detention of an infectious patient while awaiting transference to other care.

On the second floor (not shown in the plans printed with this article) the entire central space on both sides of the corridor is occupied by the x-ray department. The right hand wing is for ophthalmological work, the left hand wing for the ear, nose and throat department. In the latter pro-



The fourth floor is given over to general medicine, neuropsychiatry and some of the special branches of the work.

vision is made for individual cubicles for every patient, each booth provided with complete unit equipment.

On the third floor the central corridor is mostly devoted to skin diseases, the eastern wing entirely to syphilis and the western wing to genito-urinary work. Here again, individual cubicles with unit equipment are provided for each patient.

On the fifth floor are facilities for general surgical patients, including an orthopedic and gynecologic department.

Fourth Floor Accommodates Many Services

The fourth floor, as shown in the plan, is given to the general medical department, neuropsychiatry and some of the special branches of medical work, such as cardiography, tuberculosis and gastro-intestinal service. The space for general medicine, as will be observed, comprises a series of unit examining rooms, most of which are provided with two small dressing rooms opening directly from the main corridor and also into the examining room. The inner doors are controllable from the examining room, while the outer door can be locked by the patient from the inside but can be opened by him at any time so that he is never locked in.

Each examining unit in the medical suite, as in pediatrics, contains an examining table, a small desk for the doctor, a chair, a hand lavatory, a small instrument table, a stool and a step-up bench to aid the patient in getting on and off the examining table. The location of the waiting spaces for patients on this and other floors is at the corners, arranged, in most instances, so as to be under the supervision of a control desk at which the clinic secretary is located, this in turn being usually adjacent to one of the social service rooms. A system of signals from each examining room to a control desk of the department has been installed to inform the clinic secretary when the doctor is ready to have the next patient sent to the examining room.

Provision is made for an electrocardiograph adjacent to two examining rooms for cardiographic work. A fluoroscopy room is located on the medical floor to avoid the necessity of sending patients to the main x-ray department for this purpose. A large, specially equipped room is arranged for dietetic demonstrations, intended to be used for diabetes and other conditions requiring special dietary regiment and instructions. There is a room for basal metabolism with two booths, a four-room suite for neuropsychiatry, and a three-room suite, with dressing booths, for tuberculosis. The general laboratory for routine clinical work is on this floor. It is intended that anything beyond the ordinary routine work will be sent to the main laboratories of the medical school.

General Surgery on Topmost Floor

On the fifth floor, for which the plan is shown, is located general surgery, including a double suite, for men and women respectively, containing in each part a dressing room with three cubicles to give individual privacy, and two individual examining rooms. Near by is a small operating room for minor operations with a sterilizing room and nurses' worktable and a scrub-up room. All

but minor operative work will be performed in one of the affiliated hospitals. A room especially equipped for proctology is adjacent to general surgery.

The southeast corner of this floor is devoted to gynecology. In this suite each unit includes a room equipped with a table, a lavatory, an instrument sterilizer and two dressing rooms. The northwest wing of the fifth floor is mostly occupied by orthopedics, with three examining rooms, a large room with curtained booths for minor work, a plaster room and a gymnasium.

A feature of special interest on the southwest corner of this topmost floor is a reading room 28½ by 23½ feet with bookshelves built in along one side and eight reading tables accommodating eight persons each. The central part of the room is clear and has been provided with a stereopticon and folding chairs which are kept in special cabinets in the base of the bookshelves when they are not in use. Some eighty persons can thus be seated for a staff meeting, lecture or demonstration, and if the seats at the reading tables are utilized, about twice as many persons can be accommodated. This room is planned to be used as a library and reading room for medical men, nurses and social workers and for gatherings of the medical or administrative staffs, for educational lectures and for public health meetings of medical societies and of the staffs or members of the nursing and social agencies.

Among other special features of the building is a cafeteria capable of seating forty persons at once at the tables. There are eleven lunch counter seats in addition. This cafeteria will be used by medical and administrative staffs, students and patients. It is in the southeast corner of the basement, with ample light and air from windows on three sides.

Lounge Space Is Ample

Every floor has been provided with a room designed for use by medical students when they are not actively engaged in assignments for work with patients in a departmental unit. On the basement floor are also a large, well-equipped lounge for the medical students with adjoining lavatories and showers, a lounge for the medical staff and locker rooms providing an individual locker for each member of the staff and each student. Similar provisions of lounge and locker space for women staff members and students are also located there. Rest rooms with bath are provided for patients of both sexes.

The building will be supplied with steam from the central power plant that serves the entire university group. As a consequence, comparatively small space has been provided in the basement for mechanical apparatus, switchboards and the like. Toilets for patients of both sexes and for the staff are provided on each floor. All corridors have been designed to open directly to the outer air. Janitors' closets are on every floor. Storage cabinets for supplies for immediate use are in each department, with a main storage room in the basement.

Solving the Architectural Problem

The material selected for the exterior was a smooth Indiana limestone, varying from a warm gray to a light buff in color. In considering the type of construction and the materials for interior finish, the consultant, the architects and the supervising engineers (Stone and Webster) kept in mind constantly, not only the initial cost, but economy of maintenance. The building is a steel frame structure with short span flat concrete slab floor construction. The slab was thickened somewhat to permit the running of short lengths of pipe and conduit in the slab itself and to make it possible to omit the usual cinder fill.

For the corridors it was decided to use a terrazzo floor with a verd antique base and border on the first floor and a black base and border throughout the remainder of the building. The toilet rooms have a terrazzo floor base and border and a warm gray flush tile wainscot. With the exception of the x-ray rooms, which have a rubber floor, the majority of the rooms have a floor covering of mastic tile with a cement base and border. The corridors have a marble wainscot of Alabama madre vein, the walls above being painted a light buff. The window sash and frames are of wood, and all interior doors except those to fire stairs are of birch with a lighter colored inlaid stripe. These doors and the remainder of the interior woodwork in the building were given a light walnut stain, lacquered and waxed.

The total cost of the building, including complete equipment and all fees, fell just within the appropriation of $900,000.

As the Children's Hospital, the first unit of the medical center group is already completed, the designers of the Falk Clinic deemed it advisable to adhere more or less closely to the same architectural style in the development of the design for the exterior of the building. The great number of small examining rooms, each requiring a window, made the architects' problem particularly difficult. The efficient medical functioning of a varied and highly complicated modern clinic was considered of primary importance and the satisfactory solution of the architectural problem proceeded from this premise.

A Hospital That Is a Credit to Its Park Avenue Surroundings

By JOSEPH ELLNER
New York City

OCCUPYING what is without doubt the most expensive, per square foot, hospital property in America, the new addition to the Lenox Hill Hospital is casting its impressive shadow over the aristocratic Park Avenue sector of New York City. The first part of the unit opened its doors last fall and when entirely completed, the structure will house a 650-bed hospital unit, self-contained under a single roof.

In accordance with the building program being carried out by the hospital's board of trustees, the remaining antiquated buildings of the hospital—they date from the Civil War era—will be shortly demolished and additional up-to-date hospital structures erected. The installation of equipment is now being completed, the patients and hospital departments housed in the old buildings having been transferred to the first unit of this new hospital.

When finished, the Lenox Hill Hospital, which is one of the oldest in New York, having been founded in 1857 as the German Hospital and Dispensary, will be the fourth largest hospital in the city under private management and one of the most modernly equipped in the country. It covers almost an entire block, from Park Avenue to Lexington Avenue, Seventy-Sixth to Seventy-Seventh Streets.

Fitting the Structure to the Site

The site occupied by the new unit presented several interesting problems for the architects to solve. The architects were York and Sawyer, New York, who have designed many notable hospital structures, among them the Hospital of the Rockefeller Institute for Medical Research, the Fifth Avenue Hospital, the Hospital for the Ruptured and Crippled, the Manhattan Eye, Ear and Throat Hospital, all of New York, the new Allegheny General Hospital and Children's Hospital

The main entrance to the Lenox Hill Hospital, New York City, pictured here, faces on Seventy-Sixth Street.

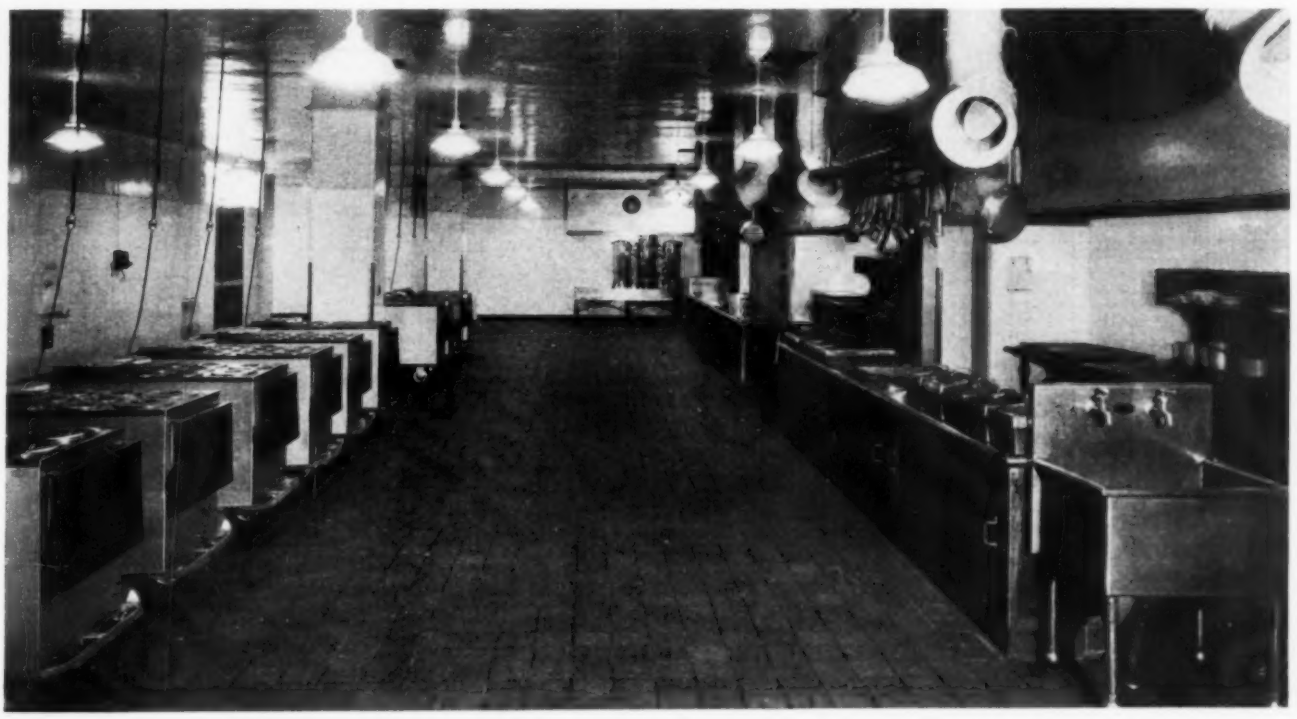
Furnishings in the private rooms, one of which is pictured above, consist of a wooden bed with a specially designed mattress, a chaise longue, a club chair, with tapestry upholstering, a desk and a bedside table. On the eighth and ninth floors are pantries designed for the use of private patients, one of which is illustrated below. The picture shows the individual refrigerators in the pantry.

of Pittsburgh, the Blodgett Memorial Hospital, Grand Rapids, Mich., and others in various parts of the country.

The first problem was the size of the plot, limited by an apartment house, not hospital property, on the east side and the private patients' pavilion, a modern structure, on the west side. The latter had to be incorporated into the new structure and be made an integral part of the design. The second problem was the old ward buildings on Seventy-Seventh Street, which could not be demolished until the new unit on Seventy-Sixth Street was completed and ready for occupancy. The third part of the problem was that the new unit would have to handle all the regular activities of the hospital when the old wards were finally demolished. The final problem was that the entire north wall of the new unit must be sufficiently distant from the old building to admit light and air into the old ward structure for at least a year and a half while the new building was being erected and made ready for occupancy.

Dominated by these conditions, the architects, with the cooperation of Dr. S. S. Goldwater, consultant, New York City, achieved a hospital structure of fine exterior masses and splendidly coordinated interior spacing, in line with the best practices of modern hospitalization. While the existing private patients' pavilion influenced to a degree the general type of architecture, the new building departs sufficiently in the direction of simplified, impressive masses and details to give it an entirely new character. The Italian Renaissance style has been adroitly modified to meet modern city conditions.

The new unit is eleven stories high, built of light brick with limestone trim up to the second floor and steel construction. It is fire resistive throughout, and is planned for the maximum amount of light and air. With this addition, the Lenox Hill will provide for about 100,000 patient days a year in its present size, and for about 100,000 dispensary visits; the capacity is to be doubled, increasing the number of beds from 325 to 650 and adding greatly to the space to be used by the medical and surgical departments of the hospital.



Meals are prepared in the main kitchen in the basement and are sent in heated food trucks by special elevators to the patient floors.

The building of the whole unit in the form of an H makes possible the utmost in light and air. On each floor, facing the south, are open loggias on to which the beds may be moved.

The usual white hospital effect has been scrupulously avoided by the use of old ivory finish on the metal beds, and solid wooden beds in the private rooms. Throughout the building they are provided with the new type of bedding which consists of a covered spring unit having 286 coil springs on top of which is the hair mattress. The mattress is made in sections which means that the hair may be replaced rapidly and economically at those spots that first go flat.

A number of novel features in the new building are well worth noting. On the seventh floor, which

is used by semiprivate patients, are units of two rooms each. A small room furnished with a desk and other equipment has been installed between two rooms. From here a nurse serves the four patients in the two rooms. Thus the patients obtain the equivalent of a private nurse service at a greatly lowered cost. If the experiment proves satisfactory, there will be many units under this system in the second building operation.

An uncommon device in hospitals may be found on the street floor, facing the entrance and near the information desk. Here two electric registry boards signify whether or not a specified doctor is in the building. Another such board is in the telephone room where the switchboard operators consult it when replying to incoming or house queries.

An Effective Signal System

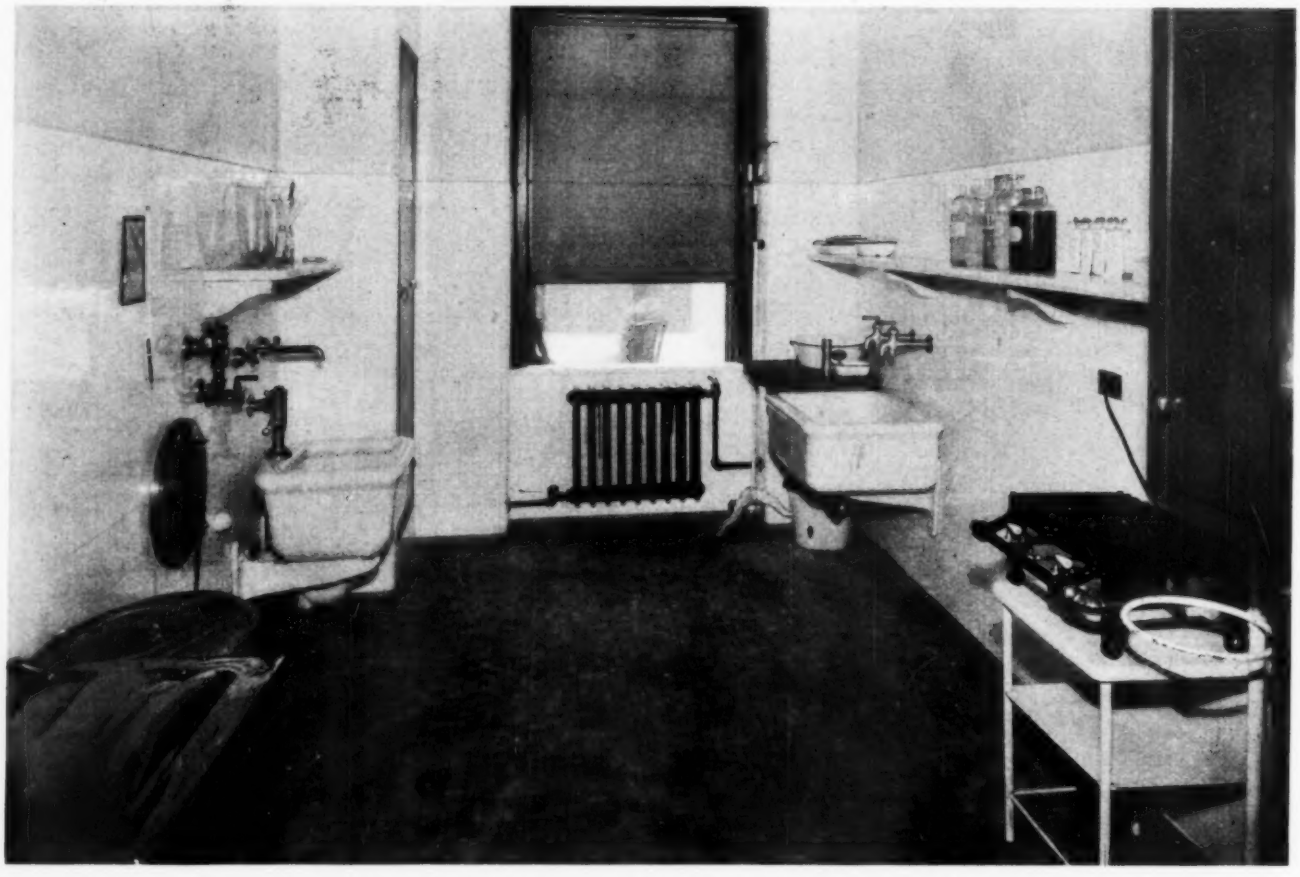
The patients' signal system is expected to prove unusually effective, since the request for service or aid is recorded in four different places—a press of the button simultaneously buzzes and puts on a red light outside the patient's door, on the register board in the office, in the floor kitchen and in the flush rooms.

There are two lobbies in the new unit; one, at the Seventy-Sixth Street entrance, is to be for private patients; the other, at the Seventy-Seventh Street entrance, is to be for ward patients. A corridor and door connect the two lobbies. At the east and west ends of the center corridor on each floor throughout the building, there are alcoves furnished as comfortable lounging places for visitors who find it necessary to wait at the hospital for any length of time.

Elevator System Is Well Planned

In the planning of the elevator system, the object was to segregate the lifts so that private and ward patients would each have separate accommodations. Eight elevators comprise the system, two for interfloor traffic for nurses and doctors, two for food, two for private patients and two for ward patients. The food elevators open into the pantries on each side of the building which they serve exclusively. Electrically heated food wagons placed in these elevators are able to proceed directly to the desired floor.

Another point of economy in management worth mentioning is that the elevator system makes possible the running of only one of these eight elevators from ten-thirty o'clock at night until the morning hours. The system is equipped



The sink room illustrated is typical of the utility rooms on the floors devoted to the medical and surgical treatment of free ward patients.

A feature of this semiprivate room is the nurses' station, seen at the left, from which one nurse can serve four patients in two rooms.

with a self-leveling device and all corridors have swinging doors which keep traffic noises from the patients.

Sound deadening was an important point of consideration by the architects. Corridor ceilings are treated with sound absorbent plaster; pantry ceilings in all parts of the building are of sound absorbent block tile. All private rooms and corridor floors above the first story are of dark mottled rubber tile, while the borders and the bases are terrazzo; on the third, fourth, fifth, sixth and seventh floor rooms the flooring is of mastic tile of varying patterns, to relieve the monotony of uniformity.

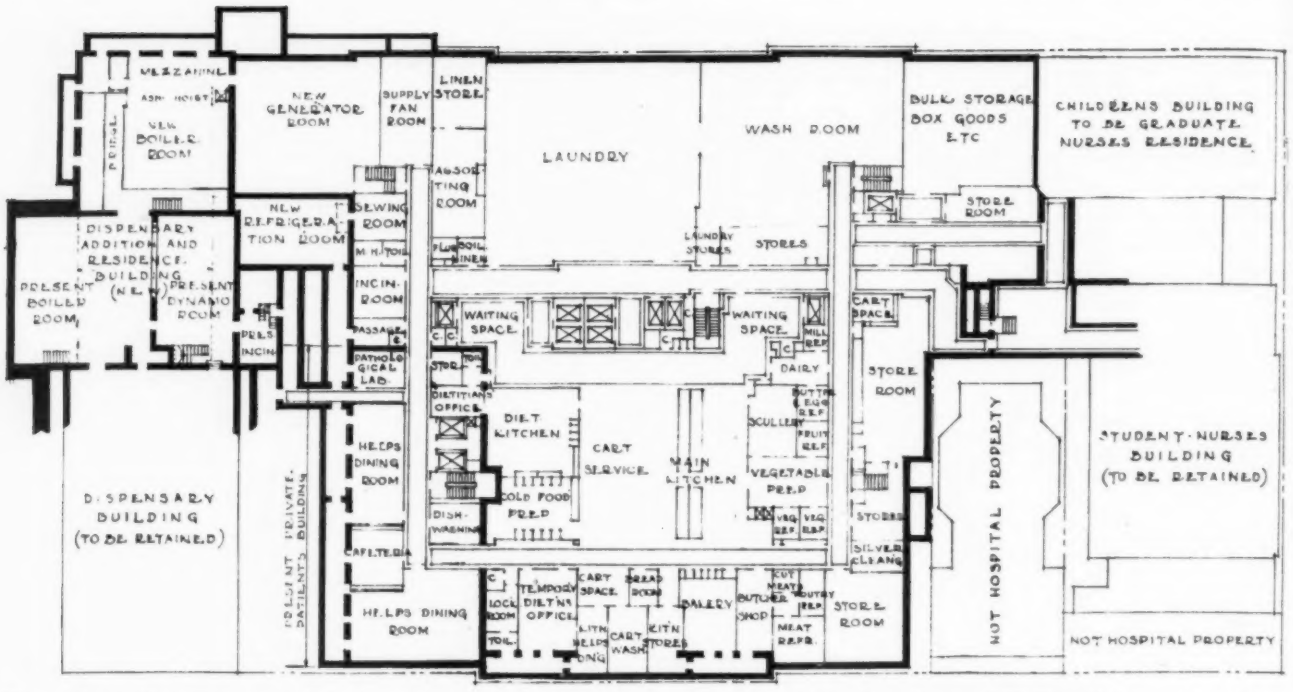
Making the Interior "Like Home"

While practicality was the paramount consideration in planning the hospital unit, a great deal of thought was put into the beautification of the interior. In an effort to make it look less like the conventional hospital, six combinations of color were used for walls and ceilings throughout the building. On every floor these combinations are varied from room to room. In further attempts to make the hospital appear "more like home," mohair curtains were used everywhere and washable window shades were made part of the equipment. In all patients' rooms radiators, window frames and sash equipment are painted to correspond with the wall, thus giving the appearance of a larger area.

Other Outstanding Features

A significant item in efficient hospital management may be discerned in the bookkeeping department, which consists of one large "L" shaped office with marble counters facing on the two different lobbies. This makes it possible to have the entire bookkeeping unit in one place without any intermingling of patients and their relatives.

Among numerous other features in the new hospital, each floor is equipped with four isolating rooms having two doors with a vestibule and barred windows. The telephone system of the dial type relieves the operator of all interior calls; private patients have the French type, no dial, instruments. The refrigerating system is of the brine type and the heating is by steam. All radiators are hung, the sections having a separation of two inches for cleaning purposes. In addition to the fire alarm system, the hospital is protected from fire in as thorough a manner as possible by

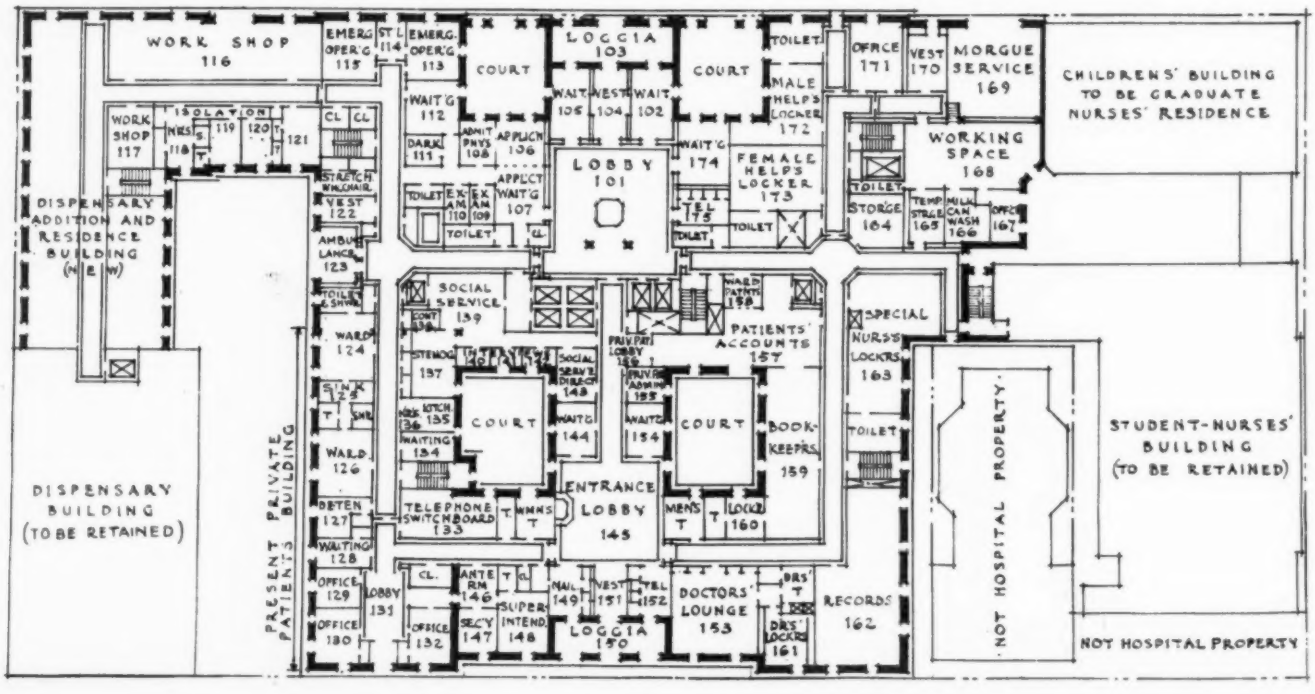


These plans, the upper one of the basement and the lower of the first floor, show how Lenox Hill Hospital is modernizing its old buildings and erecting necessary new quarters.

the use of steel shelving and steel lockers which are used throughout the building. The entire office equipment is also fire resistive.

Each patient floor has several workrooms; in one there may be found a ventilator for blankets and one for rubber sheets, an instrument sterilizer, a refrigerator for ice caps and ice collars, a blanket heater and a sterilizer for basins. The storing and sterilizing of bedpans is the exclusive function of another room. Among the mechanical devices in the kitchen, which is thoroughly modern, are such things as an electric heater which keeps dishes as well as food warm. Several clocks are on each floor, and a standard mail chute extends from the top floor to the main floor.

The general scheme of the new hospital unit effectively provides for the maximum efficiency in management and at the same time emphasizes the decorative qualities. In the lobby on the street floor, for instance, the walls and ceilings are decorated with a series of beautiful mural paintings. The central motif of these paintings represents



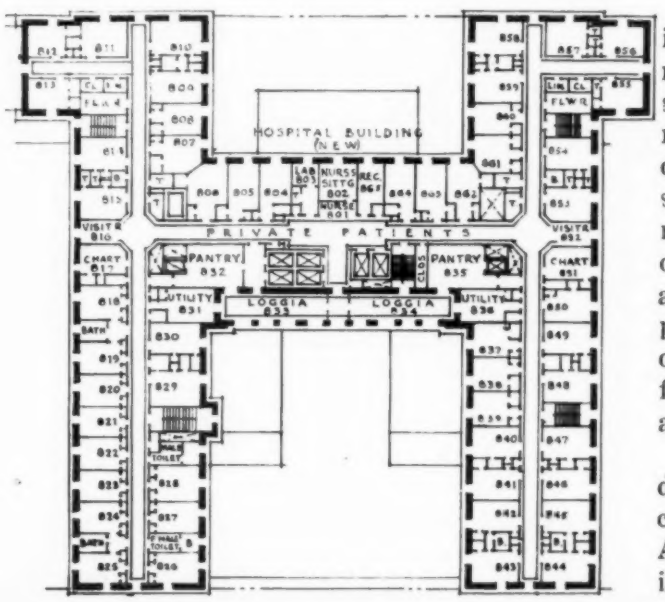
the Sun, the source of life, which is surrounded by the four symbols of Wisdom, Friendship, Health and Abundance. Around the central motif are twelve smaller circular motifs representing various animals and plants relating to medicine, which are joined or held together by ferns surrounding sheaves of wheat, the symbol of Abundance.

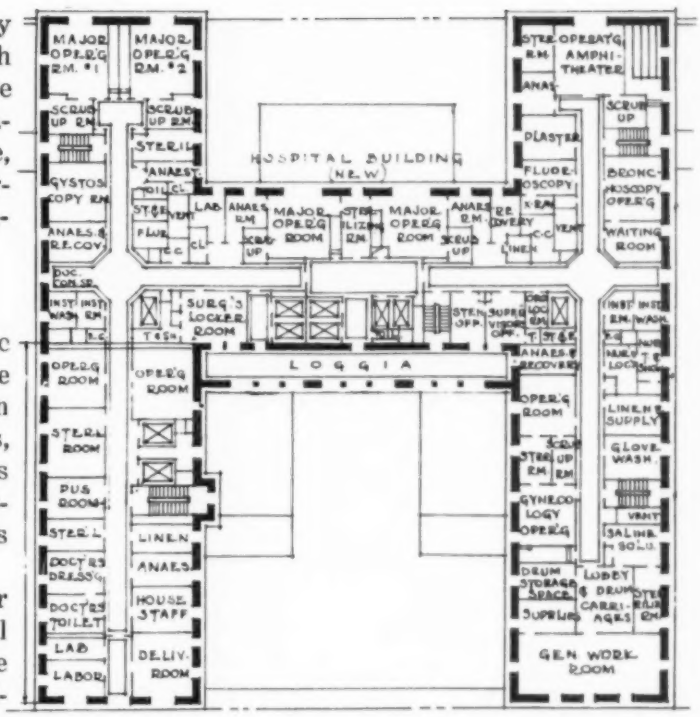
The Services on the Various Floors

The basement of the new building contains the kitchen, the stores, the laundry and other service space. On the first floor are the administration offices, the admitting wards, the detention rooms, the emergency department, the reception rooms and the staff lounge. Here also is the social service office and a large alcove devoted to bookshelves for the patients' library.

The therapy department, the dining rooms for the hospital staff and the nurses, and the basal metabolism room are on the second floor. In the front of the third, in the central part of the building, is the completely equipped medical library, which contains more than 2,000 volumes. On the same floor also are to be found the gynecology department and the maternity ward. Three floors, the fourth, fifth and sixth, are devoted to the medical and surgical wards for the treatment of free patients for the most part, while the seventh floor is given over to the semiprivate patients. In the wards each bed has individual curtains about it.

On the eighth and ninth floors are to be found the private patient department, which includes two flower rooms, a laboratory, chart rooms and alcoves destined to keep away those meddling visitors and relatives who appear in every hospital. When the hospital is finished it will be able





The operating suite is on the tenth floor, shown above. The eighth and ninth floors, pictured below, contain the private patients' rooms.

to care for 108 private patients, more than 400 ward patients and 100 semiprivate patients.

Behind a serrated surface, novel night lights are built in the walls of the private patients' rooms, about eighteen inches above the floor. The furnishings in these rooms include a chaise longue and a club chair with modern tapestry decoration, a footstool, curtains, awnings and copper screens, and there are private closets, separate toilets and adjoining baths used by two rooms. Window sashes have been equipped with ventilators.

A Self-Contained and Compact Institution

The operating suite is on the tenth floor. It will include seven major and two minor operating rooms, a large amphitheater unit, a plaster room, a salt solution room, a glove room, an instrument room, a delivery suite, a cystoscopic room, a laboratory, a locker room for the attending surgeons, special sterilizing rooms and a nurses' dressing room with showers and individual lockers. One of the few bronchoscopic rooms in the country is also found on this floor. The anesthesia rooms for patients awaiting operations prevent them from observing other patients as they go to or emerge from the operating room. The operating rooms are in green tile and are provided with two clocks.

Situated on the eleventh floor is the children's department, which is one of the best known in the country, having been founded by the famous Dr. Abraham Jacobi, the first renowned child specialist in America. There are two indoor and two

outdoor playgrounds; these will always be sunny on the outer decks since light comes from three sides. The playrooms are being completely equipped with all the latest facilities for juvenile recreation. The roof has been converted into a vast solarium for the use of patients; one side will be for ward and the other for private patients. Each side will have a sun room for those patients who are permitted to smoke.

The recently completed structure, it must be understood, represents merely about three-fifths of the space and costs involved in the building program that is now under way. The next structure on Seventy-Seventh Street, will house among other things a new morgue, an autopsy room and a museum.

With the erection of the entire addition, the present maternity service for private patients only will be extended to ward and semiprivate patients, thus making unnecessary the only affiliation for nurses now required. The training school for nurses, which now has 150 students, will be somewhat increased inasmuch as the number of beds in the hospital will be doubled. In view of the present surplus of nurses in large cities, the use of general duty nurses will be extended.

Of the numerous advantages offered by the new Lenox Hill Hospital building, one of the most outstanding is that the H-shaped building permits the closing of entire floors, half floors or quarter floors during the slow season without interfering with efficiency. Moreover, the housing of all classes of patients, except out-patients, in one building, with the laundry, the kitchen help and the nurses' dining service and all administrations in this same building, should provide the utmost in economy and efficiency, without any contact whatsoever between the different classes of patients and their relatives.

Is a Nurses' Training Course Higher Education?

Is a nurses' training course higher education or is it not?

This was the question that confronted the school scholarship committee of Braintree, Mass., when an honor graduate of the Braintree High School, Mary Lammers, presented herself for the $125 scholarship she had won for superior work in school and which was designated to be used for "higher education."

Miss Lammers had planned to enter college, but was forced to change her plans. She decided to enter a hospital training school instead, and applied to the committee for the scholarship before entering the school. The committee ruled that nursing was not higher education and refused her the scholarship.

According to a news report, Miss Lammers will fight the ruling of the committee with the aid of counsel.

In commenting on the case, Payson Smith, commissioner of education for Massachusetts, expressed the opinion that nursing can properly be termed higher education. "I think that the term, higher education, is generally used," he said, "to refer to study following the completion of a four-year high school course. Generally speaking, nursing school would be so called."

Boston physicians and hospital superintendents also came to the front to defend nursing.

The Hospital's Duty in Safeguarding a Patient's Privacy

That it is the duty of a hospital to protect the privacy of the patient was asserted in a recent decision in the supreme court of Georgia, according to a review of the case in the *Journal of the American Medical Association.*

A child was born to a couple, with its heart on the outside of its body. The family physician carried it to the Savannah Hospital, Savannah, Ga., for an operation, which was unsuccessful. After the operation, the hospital permitted a photographer to take pictures of the child. He commercialized the pictures. The newspaper, the *Savannah Press,* published a picture of the child and commented on the facts in the case. The parents sued, saying the commercialization of the pictures by the photographer had caused them chagrin, mortification, humiliation, insult and injury, and was a trespass on their rights of privacy and that the publication of the pictures by the newspaper, with its comments, was a breach of the parents' right of privacy and was caused by a breach of confidence and trust reposed in the hospital.

The supreme court, in reversing the decision of the lower court, held it was the duty of the hospital to protect the child from invasion by an unauthorized person, so as to guard the monstrous and nude condition of the child from exposure to any other person or persons and particularly from exposure to the public.

The suit was not based on injury to the dead child since the wrongs complained of were done after the child's death. The court held that the right of action, therefore, could not be in the child but must be in the parents.

Rejuvenating the Hospital—Further Studies in Modernization

By MORRIS HINENBURG, M.D.
and
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SEVERAL of the foreign delegates to the First International Hospital Congress at Atlantic City, N. J., two years ago expressed the opinion that hospitals should be replaced after twenty or twenty-five years of service. One of them said that a hospital resembled a battleship that must be scrapped after twenty years of service and the other made the somewhat whimsical remark that a small localized earthquake occurring periodically might bring about the desired transformation. The underlying thought has, of course, a strong element of truth in it, because hospitals must advance with the times and if they are not flexible enough to be permanently and readily adjustable to changing conditions (and how many of them are?) they should be abandoned altogether and replaced by up-to-date institutions.

Inventions and discoveries are part of the march of civilization and these apply not only to machinery, but to social customs, habits, traditions and conventions. The hospital of the last generation is not always suited to the scientific purposes of the hospital of the present generation. A portion of the huge annual budgets for the maintenance of hospitals should indeed be earmarked for alterations and the purchase of modern equipment to keep pace with the times, or else special extra budgetary funds should be provided for this purpose. If hospital authorities twenty years ago had foreseen and adequately provided for necessary adjustments up until a year ago, huge recent expenditures for new construction might have been avoided.

The Montefiore Hospital, New York City, organized almost fifty years ago as a haven for the incurable type of patient, functioned admirably in this capacity until 1920. For many years prior to this time, however, there had been a constantly growing demand for a hospital that would undertake to care for the chronic sick, a responsibility which the acute general hospitals were unwilling to assume because of the long period of hospitalization required by the chronically ill. Recognizing this growing demand and the opportunity for greater and more constructive service to the community, we altered our original policies and the institution was gradually transformed into a general hospital equipped to give scientific care for chronic disease in all of its phases. Although medical and nursing staffs were augmented to meet the demands of this type of patient, it was apparent after a decade of operation, that any further progress would be slow and limited because of the structural deficiencies of the

The arms of wheel chairs can be extended and grooved to receive a food tray, providing an individual table for each patient.

buildings and their equipment. What had been adequate for the custodial care of incurable patients was not suitable for patients who required skilled medical and nursing attention for periods of months and even years.

How Therapeutic Departments Were Reorganized

The first principle in our modernization program was the establishment of diagnostic and therapeutic departments that would be equipped to care for these chronic patients in accordance with the standards prevailing in the acute general hospitals since every chronic patient is potentially an acute patient. These departments were in quarters that were adequate in the earlier days, but that proved to be inadequate when the institution took on its hospital character. Several examples will be cited later to illustrate the deficiencies of departments that were organized and assigned space without proper provision for the coordination with other departments which the future might require.

After a comprehensive survey of our facilities, our board of trustees early in 1929 approved the program of modernization, and the structural and functional reorganization of the institution in accordance with what were believed to be the best hospital standards proceeded. The financing (in the spring of 1929) was made possible through subscriptions from a generous community toward the so-called modernization and expansion fund. Many of the major items involved in the program were described in detail in the March and April, 1931, issues of THE MODERN HOSPITAL. The interest which readers have displayed in this program seems to justify publication of additional notes.

The special diet kitchen, the therapeutic importance of which is being recognized more and more in chronic as in acute disease, was established shortly after the hospital began to limit its admissions to the chronic sick. Provision for this department had not been made in the original plans of the institution and as a result it was assigned later on to the only available space, which was far distant from the main kitchen and from the ward buildings. The faults of such an arrangement are obvious and it was decided early in the modernization program to centralize the therapeutic diet kitchen with the main kitchen and to use for this purpose the large linen and sewing room, adjoining the main kitchen in the central ground floor of the hospital. We would thus have in one large unit, centrally located, beginning at the receiving entrance, the following activities: the purchasing department; the receiving department; the butcher shop; the main kitchen; the bakery; the therapeutic diet kitchen and the central storerooms. Obviously this arrangement allows for a greater concentration of effort and supervision and conserves a great deal of the time and the energy of the working staff. There was no longer to be any duplication of work in the kitchens. The linen and sewing room was transferred to a more suitable location on the ground floor of one of the patient buildings and steel shelving was provided under a modernized arrangement of the equipment.

In the therapeutic diet kitchen, which was thus established, the cement floor was taken up and replaced by a red tile floor. The walls were tiled in white up to a height of seven feet. Additional spacious refrigerators were added. A well appointed office was provided alongside of the kitchen for the therapeutic dietitian and her assistants. All of the cupboards and sinks were constructed of either noncorrosive metal or porcelain to meet special needs. An old storeroom alongside of the linen room was connected with the therapeutic diet kitchen and was used as a garage to store food trucks between meals. This did away with the congestion of food trucks in corridors, which impeded traffic along the lines of communication.

Saving Steps in the Kitchen

Many new and modern additions of equipment, such as ranges, bake ovens and steam cookers were added to the kitchens, besides an ice cream freezer with a supply of ice cream storage containers. A cold storage unit for the temporary storage of garbage was also installed in an extension of the main kitchen. Metal bins were placed in the bake shop. The various sections of the culinary department, such as the main kitchen, special diet kitchen, bakery, butcher shop, refrigerators and storerooms are interconnected and self-contained.

This arrangement which did away with the waste of time involved in the management of a separate kitchen at a distant point, had a number of advantages which are worth recording. The food service to patients has, of course, improved with the newer equipment and the time which the staff of the diet kitchen has saved in work, has been used for the supervision of food service from the ward pantries and for the practice of bedside dietetics. The dietetic staff is able personally to distribute morning and afternoon nourishments and participate in programs of ward instruction to the nursing staff. The distance that food trucks had to be transported through the ground floor of the corridors of the hospital was cut almost 75 per cent and pantrymen now have time for additional chores in their pantries. The wear and tear on food trucks and the damage to walls and doors

have been considerably reduced and, although secondary to the basic motive for modernization, are in themselves important items of economy.

Because of the limited size of the ward pantries, it was decided to enlarge them by absorbing an adjoining locker room on each floor, rearranging the modernized equipment in the larger room thus made available. A dishwashing machine was placed on every floor as well as automatic egg boilers and a battery of tea and coffee urns. The balance of the equipment of the pantries consists of a combination of steam and serving table with a noncorrosive metal top and shelf. A hot meal is always assured the patient, since the food containers are transferred from the food truck in which they are sent from the main kitchen to the steam table.

The bandstand on the leveled east lawn is completely surrounded by ward buildings and each ward bed is connected with it by radio.

How the Bed Capacity Was Increased

On overhauling the pantries we found that the old brine lines which served the refrigerators had to be replaced as their period of usefulness had come to a close after eighteen years of service. Copper bands were used to fasten the cork insulation instead of galvanized iron bands which corroded the cork. The cafeteria equipment in the dining room of the porters and orderlies was completely replaced with noncorrosive metal in up-to-date models.

The change in the character of the institution from that of a home for chronic invalids to that of a hospital, was slower than the increased demands for beds to accommodate patients suffering from chronic disease who could benefit by intensive hospitalization. Unlike the general experience of the acute hospitals, we have been obliged to maintain a list which has totaled as high as 200 patients waiting for admission to the wards. This situation could not be ignored indefinitely and proved the stimulus for a study of our hospital facilities with a view toward increasing the bed capacity through internal structural alterations. The study was made with several principles in mind: (1) the maximum use of ward space in accordance with the standards of the State Department of Public Welfare; (2) the absorption of blind corridor space which served no useful purpose; (3) the fusion of one or more single or double rooms which we had allowed our ambulatory custodial patients in a separate building specially constructed for their use; (4) the transfer of certain special laboratory facilities

(not including the so-called unit or clinical pathologic laboratories) to ground floor locations, thus releasing space for beds and (5) the reduction in the size of certain rooms which required considerably less space than was originally allotted for activities which they contained.

The net result was an increase in the hospital of seventy-four beds or 12 per cent of the total capacity of our city institution. The Schiff Pavilion, which was built largely on the single and double-room plan to take care of sixty-six of the so-called custodial cases (graduates from the main buildings who could not be evacuated for social reasons) requiring the service of an attendant only, was converted at a cost of something like $12,000 into a pavilion housing 111 patients by the application of the modernization principles that have already been enumerated.

The immediate effect of this increase was a reduction in the per capita cost of maintenance, which in itself proved the wisdom of the modernization investment, as well as a reduction in the number of patients waiting for admission and the average waiting time. The average waiting time is of considerable importance in a hospital like ours because of the fact that chronic patients are not acceptable in the acute general hospitals and must therefore spend the waiting time in homes which do not provide specialized care. The increase in the capacity of our custodial section permitted a better turnover of patients in the chronic sections of the hospital.

Additional points in the modernization of our custodial pavilion were the following:

All of the wards were made to open on to balconies, those balconies on the south being enclosed in glass and heated for winter use. The central radio system was extended to include this pavilion. Loudspeakers were installed on the porches and ear phones were placed at the bedside of every patient. The glass enclosure is so arranged that the upper section can be taken down during the summer months. In order to avoid the heat of the sun in the summer time, large awnings were provided for the top which is made of a reenforced glass.

The third and top floor is now reached by the elevator which was lifted to the proper level and made fully automatic. On this floor we had ten small single rooms for ambulatory custodial patients, most of them not in a position to receive the sun. The partitions were therefore removed and a large ward was established in which every patient has the benefit of the southern exposure and a measure of privacy because of the installation of curtained cubicles for every bed. A special additional fire escape was provided from this floor to the balcony below and is wide enough for the transportation of nonambulatory patients if this should be necessary in emergencies. On this floor a utility room, shower and tub bathroom and additional lavatory facilities were provided, all of the equipment being of the latest design.

An old ward pantry was enlarged by absorbing an adjoining locker room, and the modernized equipment was rearranged in the larger room thus made available.

A few additional words might be said about the

elevator. An automatic attachment was installed for the use of ambulatory and wheel chair patients. The installation is somewhat unique, inasmuch as both the inside gate and the outer door open and close automatically and simultaneously when the elevator reaches its destination. The doors remain open for seventeen seconds even though other floors signal for the car, giving the patients ample time to enter or leave. The car will not move unless both the inner gate and outer door are tightly closed, which is an additional safeguard.

Men employees enjoy the billiard table, radio, talking machine and card tables that have been installed in the recreation room in the dormitory building.

The dining room in this pavilion was not large enough to accommodate the increased number of patients at the tables since the majority of the patients are chair-ridden. A number of experiments were attempted with wheel chairs and we finally evolved a scheme by which we were able to add a device to the wheel chair which would enable us eventually to remove most of the tables in the dining room. The arm of the chair now has a forearm and an elbow joint and both the arm and forearm on each side are grooved to receive a food tray, thus providing an individual table for each patient. The forearms fold back on the elbow joint and double the thickness of the arm when they are in place. The benefits of such an arrangement will be obvious. The patients like it inasmuch as the new scheme provides them with greater comfort and enables them besides to move their chairs to any location in the dining room where they can choose their companions during meal times. The accompanying illustration shows the arms extended accommodating a tray which has been properly adjusted.

The change in the service which the hospital is rendering to the community affected the other departments of the hospital such as the laundry, which was originally established to meet the limited needs of the custodial type of case. The equipment had been in operation for seventeen years and required a large staff of employees. The underlying principles in the modernization of the laundry consisted in the establishment of modern equipment possessing labor saving devices and automatic safeguards to protect the personnel against injury. The laundry now serves a population of 1,400 patients and employees and in purchasing the new equipment, we gave some thought to the future expansion possibilities of the hospital.

Modernizing the Laundry Unit

The laundry unit is on the top floor of the service building and is flooded with natural light from all four directions. One of the results of the introduction of the new equipment was a sharp reduction in the number of employees in this department. The new equipment includes the following: four cylindrical washing machines (two 42 by 42 and two 42 by 84) with high pressure steam which serves as a heating as well as a sterilizing medium; two 48-inch latest type extractors capable of 1,400 revolutions a minute; collar starching machine; ventilating drier; starch boiler; porcelain enameled wash tubs for finer

hand washing; two hot air tumblers (one 42 by 90 and one 36 by 64) which connect with the exhaust ventilation system; one 120-inch 8-roll steam heated mangle; six twin pressing machines for shirts, aprons and uniforms; six hand ironing boards equipped with electric hand irons; distributing, assorting and marking rooms.

The private pavilion of our hospital was reorganized on a semiprivate basis. The rates charged are $5 a day besides doctors' fees; on the recommendation of the social service department, special diagnostic and therapeutic procedures are done without charge in cases where the family can afford the room rate and no more. There was, however, a demand for additional facilities at a still lower rate and we decided therefore to convert several sets of double rooms on each of two floors into small wards by the removal of partitions, thus providing six beds in place of four at the rate of $4 a day. Curtained cubicles were installed here as in all other wards of the hospital. We regard this venture as experimental, the cost of the experiment being small (the cost of the partition).

The linen room has been called upon to meet the demands for increased service resulting from the greater turnover of special types of patients. Of these many suffer from degeneration of the nervous and circulatory systems and as a result incontinence is somewhat prevalent in this group. The number of draw and bed sheets used for the wards increased to such proportions that the laundry before modernization could not undertake to do the work. It was therefore decided to seek some means of dealing with the problem and with the cooperation of the housekeeping department, old linens were converted into what may be called "incontinent pads." These pads are approximately 18 by 24 inches in size and ¼ of an inch in thickness. They are inexpensive and can be readily washed at lesser cost than the large sheets. They conserve the bed linens and protect the patients' skin from the effect of the accumulated heat from the rubber sheeting, materially reducing the load of work in the laundry. Judging from the present success of these pads, the economy will doubtless be considerable.

Comfort for Wheel Chair Patients

Approximately 40 per cent of our patient population are of the wheel chair type and of this number many are so helpless that every convenience was provided to afford comfort in these chairs. The dreaded bedsores, of which we are so remarkably free, and terminal pneumonias are frequently prevented by encouraging the patients to be up and around, and considerable comfort has been given to them by pillowed seats and back rests. The cushions are made of black horsehair, encased in 8-ounce mattress ticking and surrounded by attractive slip covers. These covers have proved to be durable, can be readily laundered and are popular with the patients.

Encouraging the Staff to Study

The hospital in its program of modernization has done much to improve the intramural educational facilities for the members of its medical and allied staffs through the maintenance of a well stocked and carefully selected medical library. This program is all the more necessary in view of the distance of the hospital from the excellent library of the New York Academy of Medicine (a ride of forty minutes from Gun Hill Road). This valuable adjunct to the educational program of the hospital, maintained at considerable annual expense and as a rule largely neglected in many hospitals, has been an important factor in attracting capable men for hospital work.

The hospital subscribes annually for approximately sixty-five periodicals recommended by the chief of each service and approved by the committee on records of the medical board. Periodicals that have more than current value are bound in volumes as permanent additions to the library. Bound volumes are classified and stacked on steel shelving lining the walls of the library. Current journals are conspicuously displayed on tables provided with sloping supports secured along the length of the table, an arrangement which leaves adequate space on either side for writing or reading.

The circulating library for the patients has become so popular and the number of contributions of books so numerous, that it was necessary to provide larger quarters to accommodate this important phase of hospital activity. A special study room on the ground floor, not used as often as was originally intended and centrally located, was converted for the new patients' library. The available space for library purposes was thus increased four times over the original allotment of space. The room is well proportioned, has plenty of natural light and is well ventilated. A passageway, sufficiently wide to accommodate wheel chairs, runs through the length of the room with double rows of metal book stacks on either side. Book binding equipment was set up in one corner of the room and the office of the librarian (who is also the editor of the *Montefiore Echo*, the monthly publication for patients and employees) was located in another corner. A number of appropriate pictures decorate the walls. Comfortable chairs and tables including magazine racks were added for the comfort of the patients. There is

The modernized laundry unit is on the top floor of the service building and is flooded with light from all four directions.

enough shelf space to accommodate 12,000 volumes. Individual sections have been set aside for languages, fiction, reference works, textbooks and books on other special subjects. A complete reference catalogue in loose leaf form, and card index files are available. The library has at its disposal a metal cart on wheels for the distribution and collection of ward patients' books. The books are also available to the personnel of the hospital at any time.

How the Purchasing Office Was Relocated

The supervision of our receiving department and the care of the storerooms are under the general jurisdiction of our purchasing executive. These departments, as we said before, are in the general vicinity of the kitchens. Formerly the central purchasing department occupied space among the executive offices at the main entrance of the hospital, a considerable distance from the departments over which the purchasing agent exercised supervision. We decided, therefore, to provide space for this activity in the receiving section of the hospital. By rearranging the partitions of the receiving office, we were able to provide adequate space for the purchasing agent and his clerical staff. Since the purchasing office is visited daily by many sales people, all of this traffic has now been eliminated from the main entrance to the hospital. The most important advantage of the change, however, lies in the fact that the purchasing executive is now able to check and inspect the quality of the merchandise which is now delivered at his feet. Most of his purchases are made for the food department of the hospital and the office of the dietitian is alongside in the general scheme that has been outlined. He has closer supervision of the storerooms and is able to inspect them more frequently. Incidentally, the office vacated by the purchasing agent on the main floor was ideally suited for the cloak room of the visiting staff and we therefore proceeded with the installation.

With the assistance of unemployed workers assigned by the Emergency Work Bureau of New York for duty at the hospital, several vacant lots adjoining the hospital were transformed from ugly dumping grounds to small playgrounds that are pleasing to the eye. The trees and hedges were pruned and trimmed and the lots were fenced in. This space is now available for the patients and their visitors and some of it has been used for the construction of a double concrete tennis court to provide additional recreational facilities for the many members of the staff who are devotees of this sport.

From Ugly Lots Into Pleasing Playgrounds

The top soil for the improvement of the vacant lots was obtained by leveling two large terraces on the east and west lawns of the hospital buildings. These terraces permitted only a limited use of the grounds. Tons of large stones were removed from these locations and used to bank the ground surrounding the tennis and handball courts. The remainder were used for filling in purposes on the

vacant lots to which we referred. On the site of the east terrace, which is surrounded on all sides by ward buildings, a red tapestry brick outdoor pavilion and band stand was constructed, covered by an ornamental copper roof. Electric lights were installed as well as a microphone attachment for broadcasting concerts over the central radio system to bedridden patients. Patients in wheel chairs and stretchers are now able to spend more time out of doors, weather permitting, and are assured adequate protection from the sun while enjoying the fresh air.

Our roofs are extensive and needed repairs were not infrequent. We found it an economy to employ a specialized roofer on a monthly basis who spends much of his time in the metal shop when he is not at work on the roofs. With this arrangement, wooden drain boards for use in various parts of the hospital were covered with noncorrosive metal in our workshop at a cost equal to about one-third of the expense of purchasing solid noncorrosive metal drain boards. The difference in cost lies in the filling, which is wood in this case, instead of solid metal.

The old type of door mat which is found in hallways and vestibules is not decorative, and since such mats are generally from two to three inches in thickness, they interfere with traffic. At such locations we have arranged to sink the mat so that it is flush with the floor, lining the outer edge of the depression with a brass strip. One of the advantages of this arrangement is that the mat remains in the location where it is most needed and does not tend to slip out of position.

Threefold Object Has Been Achieved

Our hospital has grown from an institution for thirty patients to one that now cares for 949 in all of its branches. The broad lines of progress have served to accentuate the traditions that have been created for the hospital and questions are frequently asked regarding our history. To meet this need, we have organized a historical exhibit which consists of photographs with explanatory legends, books, original papers, monographs, treasured souvenirs, relics of a past day, publications by members of the medical and allied staffs, articles prepared by patients in the occupational therapy department and many other items of interest that never fail to attract the attention of visitors to the hospital. The exhibit is arranged in historical sequence and conspicuously displayed several times during the year, particularly on the occasion of the annual meeting of the members.

The many changes that were made in the hospital have enabled us to achieve our threefold object: (1) to reduce maintenance cost while maintaining our high standard of service, (2) to provide facilities in our institution to serve the type of patient for whom we now care and to make the institution comparable in staff, facilities and equipment to the modern acute general hospital and (3) to provide every possible comfort for our patients and employees. From these points of view, our modernization program has thus far proved its value and the completion of the work has been a source of great interest and satisfaction to those members of our working staff who, like ourselves, were given the opportunity to contribute to its success.

Equipping a Hotel Room to Do "Hospital" Duty

That a guest room in a hotel might well be furnished and equipped to do "hospital" as well as "hotel" duty is the subject of an article in *Hotel Management.*

The article points out that cases of accident and sickness to guests and employees occur in most hotels every year, but that relatively few houses are equipped with the specialized facilities that are required for the proper handling of such cases.

"Some hotels, it is true, provide a room for temporary use during an emergency—usually in the form of a doctor's office," the article continues. "In a few cases a standard all white hospital type of room is provided. Such rooms, however, are usable only for medical purposes; they are not available for transient occupancy."

And it is of such rooms—those for transient occupancy—that the article discourses. Two hospitals are mentioned as offering a splendid example of the type of furnishings and equipment necessary—Colonial Hospital, Rochester, Minn., and the Polyclinic Hospital, New York City. The rooms in these hospitals are surprisingly like hotel rooms in decoration and furnishings, the chief difference in the permanent equipment being in the height of the bed which, however, can be adjusted from hotel to hospital height. "Add to an adjustable bed some pieces of portable equipment and a few minor changes in the room and bath fixtures," the article suggests, "and a hospital room has been created which at the same time retains its salability as a transient hotel room. The creation of such a combination room has several possible values. Its use will definitely build good will in the minds of the guests benefited—excellent word of mouth advertising."

The article then describes the equipment of a modern hospital room and shows how it could be adapted for use as a hotel room.

The Hague's New Deaconess Hospital —A Planning Achievement

By M. A. VAN NIEUKERKEN
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REQUIRING the most devoted sense of charity, as the task of the deaconess does, the home or hospital in which she works and receives her training should bear the same character. The deaconess home should therefore be a building that embodies the highest principles in its entire conception.

The new Deaconess Home, The Hague, Holland, which is described in this article, has been designed and plans for it have been executed with a full realization of what the institution stands for and what is demanded of it.

The building was designed to care for 164 patients. Accommodations were provided for 50 patients of the first and second class; 40 patients of the third class; 16 patients between the first and second class; 22 incurable patients; 14 aged patients requiring particular care; 10 nurses who might require hospital care; 12 children. Provision was also made for 120 deaconesses and pupil deaconesses, 10 retired deaconesses and 35 interns and female and male servants.

A large site was sought, not only with a view to combining the mother house with the hospital, but also to allow for the extension of the present buildings and for the erection of others in the near future for such activities and for such training as may be needed.

Choosing the Site

A desirable site of about 6.5 hectares (13 acres) was found, on high ground, with sandy soil, at the foot of the sand dunes which line the Dutch coast, N. W. of The Hague near Scheveningen. The site was only a short distance from the more densely built up residence section of the city. During the ten years that the management has owned this site, the city has grown in this direction to within quite a short distance of the hospital grounds.

On the south, the site is bounded by a strip of woods which, in accordance with the city extension plan, will permanently remain a part of the park system; on the northwest it is bounded by the dunes which are part of Holland's natural defense against the North Sea; on the southwest is a wide avenue, the opposite side of which will be built up with residences. Even in the remote

future, a free and spacious setting for the home is thus assured.

The two ruling requirements in the planning of the building were: (1) a completely noiseless and dust free location of the hospital wing; (2) all patients' rooms facing the southeast and all rooms for living purposes facing the north.

How Traffic Noises Are Avoided

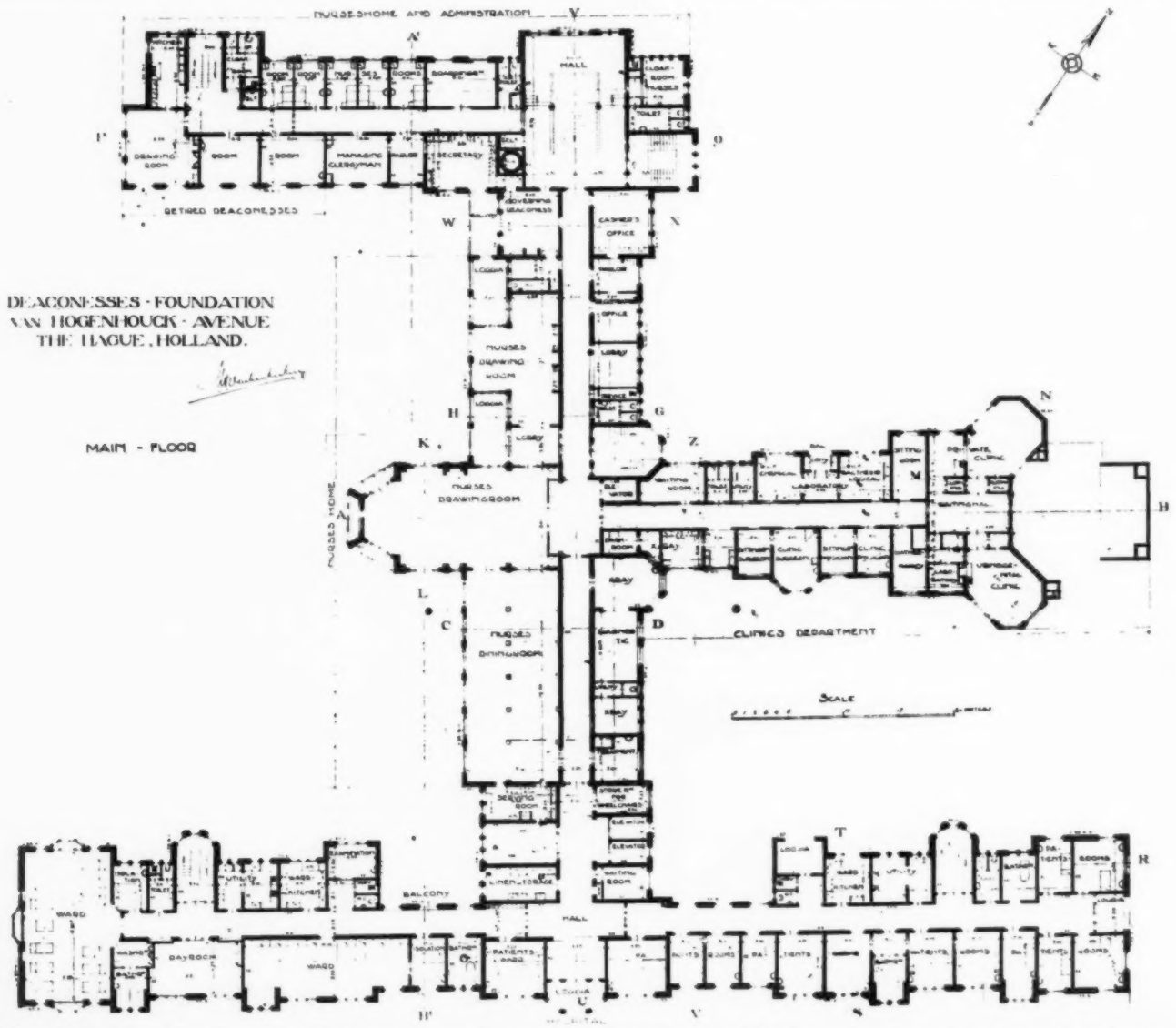
The hospital wing, therefore, is projected to face southeast, at a distance of about 325 feet from and parallel with the strip of woods which separate the grounds from the public road; the nurses' home or mother house faces southwest and southeast. Clinics, laboratories, operating rooms and the kitchen department are projected as much as possible northwest and northeast; the operating theaters face north.

The main entrance of the building is on the north side as far as possible from the hospital wing to avoid the noise and dust from automobiles and other vehicles; even on the southeast and southwest side of the building roads for vehicles are avoided. Roads exclusively for vehicular traffic surround the kitchen department. The entrance for ambulances is near by.

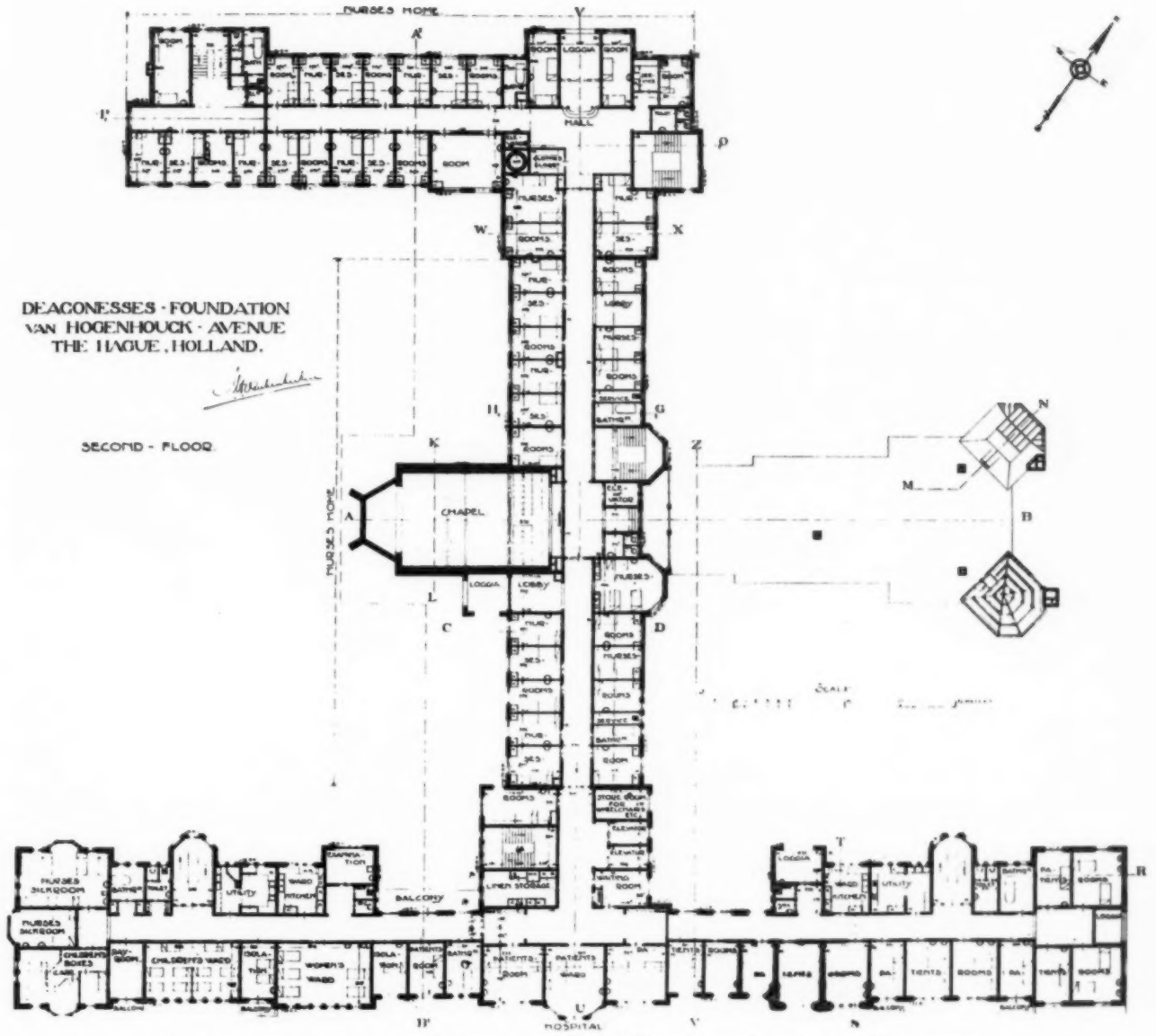
Other principal guiding factors were a central location of the linen department for easy access from both the hospital and the nurses' home, a consideration that also held for the kitchen department, with the additional requirement that no kitchen odor should spread through any part of the building.

Planning for Out-Patients

No less important a factor for a small hospital is the location of clinics and of the x-ray and sun treatment departments because of their use by outside patients as well as by the hospital patients. These departments were planned to con-



Administration and entrance facilities are grouped near the main entrance, while the patients' quarters are at the extreme south end of the building away from all noise and confusion.



On the second floor are wards for women, two children's wards and a ward for nurses.

nect directly with the hospital, but in such a manner that outside patients would not enter the hospital itself.

The chapel was to be central to the mother house to permit easy transportation of patients who might wish to attend the services, but so situated that no unnecessary sounds or noises could reach the hospital wing. It is interesting to note how admirably the central location of the chapel fits in with the spirit of the deaconesses' work which pivots around religion.

A Tour of the Building

Finally, the technical installations, such as central heating and steam and electric plants, with their inherent noises, were placed as far as possible from the hospital wing.

The accompanying plans show in which manner these various problems were solved.

Entering the main entrance of the building, with a porter's room on the left and a waiting room on the right, we mount the stairway, 2.5 meters high, into the entrance hall. A long corridor straight ahead leads to the hospital wing, a corridor to the right to the administration offices and to the home for retired deaconesses.

On the left of the first corridor are the cashier's room and the registration office separated by a waiting parlor and followed by a lobby for visitors. On the right is the office of the governing deaconess. To the left of the second corridor are the offices of the secretary and of the managing clergyman, also separated by a parlor, and the board rooms with adjoining parlors.

Following the corridor to the hospital wing we pass on the left the clinics department to which belong the x-ray diagnostic and treatment rooms. The clinics department is used by outside patients

as well as by the hospital patients. On the right of the corridor are the nurses' drawing and dining rooms, the latter with entrances towards the hall and the hospital wing.

The location of the clinics and recreation rooms makes it unnecessary for outside nurses and outpatients to enter the hospital wing and also prevents needless steps in the internal service of the buildings.

The nurses' dining room is 8 by 19 meters, and two drawing rooms, one of 9 by 17 meters for consecrated deaconesses and the other of 6 by 15 meters for pupil deaconesses, both rooms being provided with loggias, were planned thus and placed near the main entrance so that they could be easily used as reception rooms on festive occasions. The rooms are separated by glass folding doors.

The clinic department, in addition to the x-ray suite, the private and consultation rooms for both the surgeon and the physician connected with the hospital, and a small library, provides three suites for specialists who can lease them for their private practice in the hospital building. One of these units is already reserved for a urogenital practice and consists of a consultation room, 5.4 by 7.5 meters, with connected dressing rooms, a waiting room, 3.5 by 7 meters, a sitting room, 5.5 by 3 meters and a laboratory, 4 by 3 meters. The other suites are planned similarly.

The main laboratory, part for chemical and part for bacteriological analysis, is also in this department and provides complete facilities for clinicians, for specialists and for the hospital service proper. To facilitate open air examination, the laboratory is provided with a balcony and a loggia.

The Arrangement of the Wings

Entering the hospital department we find the main stairway connecting with a central lobby on the south and with the elevators opening off this central lobby on each floor are a waiting room for visitors and a storeroom for wheel chairs, wheel stretchers and other wheeled equipment. Farther on are a storeroom for linens and bedclothes and a room for the head nurse.

On the left of this lobby are the first-class and second-class patients' rooms; on the right are the wards for third-class patients.

The hospital has four floors besides the basement and the attic floor and in its entirety forms an individual structure with a fire wall on each floor separating it from the remainder of the building.

The left wing for first-class and second-class patients on each floor is divided similarly; on the ground floor of this wing are the rooms for aged patients.

The right wing of the ground floor contains the three-bed and five-bed wards for incurable patients; that of the main floor has the wards for women, with from three to eight and twelve patients to a ward; the right wing of the first floor is divided similarly to that of the main floor with the wards for men, also three to eight and twelve patients to a ward. On the second floor of this wing are wards for women, three to a ward and two children's wards, one for eight children and the other arranged as a box nursery. On this floor are also two wards for nurses in need of hospital care.

To assure safety in case of fire, but also to shorten the length of corridors, a stairway closed with draft doors is provided.

Ground Floor Is Compactly Planned

In each wing on each floor at the back are a ward kitchen, 4 by 4.5 meters; a utility room, 4 by 5 meters with adjoining space for soiled linen; a space, 2 by 3 meters for stretchers and wheel chairs; toilet rooms with lavatories for nurses and for patients; a service room with a hopper sink, and two bathrooms, 3 by 4.5 meters. The tub is placed in the center to be accessible from both sides to facilitate the handling of patients.

Open balconies 2 by 9 meters and open loggias 4 by 5 meters, accessible from the corridor, are on each floor of each wing for use in the airing of bed linen and clothes.

Adjoining the wards of eight and twelve patients are isolation rooms, bathrooms and wash rooms, forming a ward unit.

To preserve the quantities of fruit that every patient normally is presented with, there are storage niches in each corridor on each floor, under the windows and open to the outside air; above these niches are built-in shelves in which patients' flowers may be stored during the night.

As an indispensable requisite to ward nursing, each floor has an examination room, 3.5 by 4.5 meters, to make it possible to examine or to bandage the patient outside of the ward without interfering in any way with other patients.

Since it is becoming customary to transport the patient in bed to examination rooms, to x-ray suites, to clinic rooms and to operating rooms, all doors that must be passed through swing normally from one side and give a minimum clear opening of 1.15 meters.

On the attic floor of the hospital department are the storage rooms for furniture, bed stands, trunks and suitcases, those for hospital patients and for the nurses being segregated. Loggias and

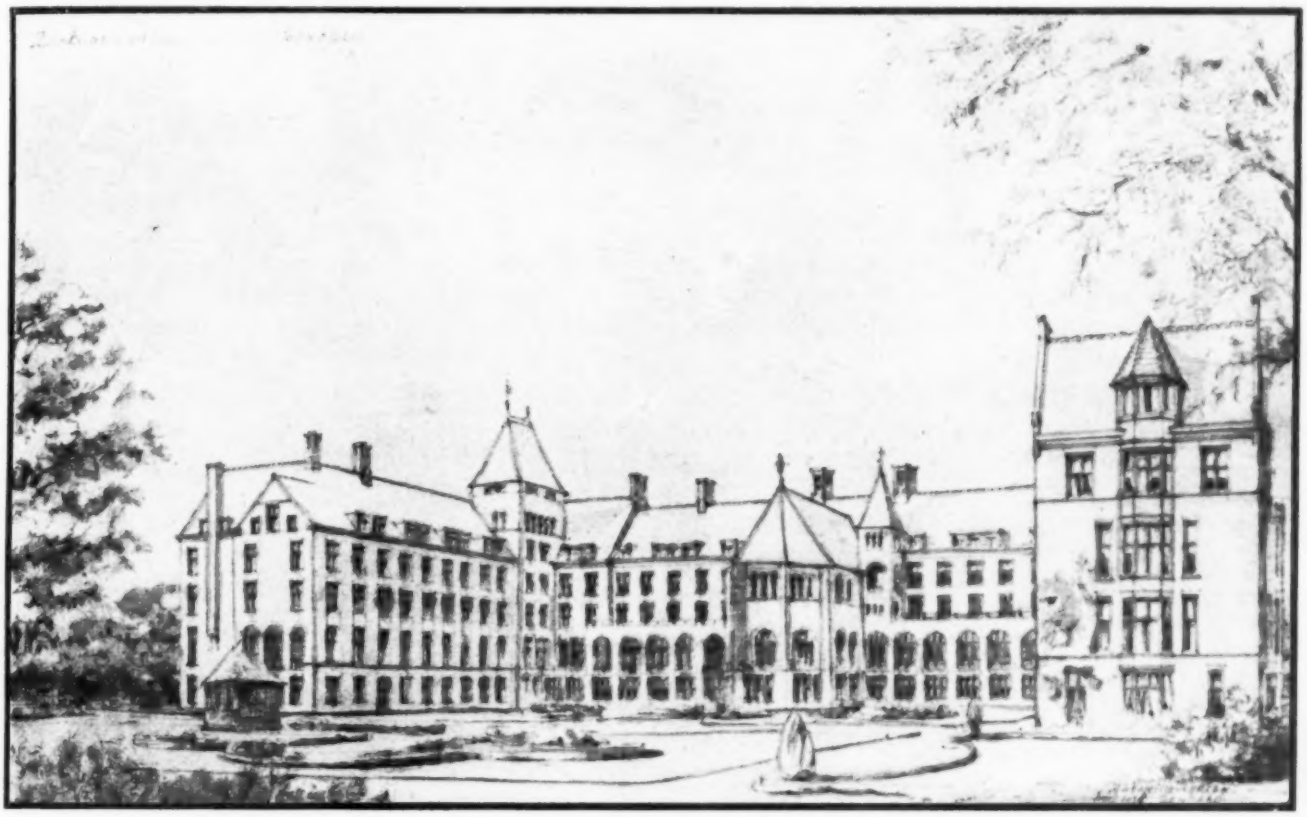
open balconies for airing and proper servicing are also provided on this floor.

Again entering the main entrance of the building, but instead of ascending the stairway, passing it on the ground floor level and following the corridor straight ahead, we find on the right the office of the chief of the technical services, the public telephone stations and the workshops of the carpenter, the painter, the cabinetmaker and the upholsterer.

Farther on the right is the linen department, closed off from the hospital wing, consisting of the ironing room, 8 by 9.5 meters, the main linen storage and distributing room, 8 by 13 meters, serving room, 9 by 9 meters, and the central bedding storage room, the latter connected with the upholsterer's workshop. Between the ironing room and the linen storage is the distributing room partitioned off by glass. The sewing room is connected on one side with the linen storage room and on the other with the bedding storage room.

Across the corridor from the fresh linen department are the soiled linen and disinfecting rooms, each with a separate door to the outside. In the soiled linen room twenty-seven open compartments along the wall are provided for sorting out the soiled clothes and linens. The partitions between these compartments are made of a granite composition and are raised sufficiently above the floor so that the floor may be easily flushed with the hose.

Opposite the sewing room is the kitchen department, planned as a separate wing. Along the corridor of this wing, on the south side are the dining and drawing rooms for the servants, male and female; on the north side is the kitchen supervisor's room, connected with the groceries' storage room. On both sides of the corridor are lavatories, utility and hopper rooms, while at the end is the distributing hall around which the kitchen suite itself is grouped.



The nurses' home or mother house overlooks beautiful well kept grounds.

The kitchen suite is only one story high to prevent kitchen odors from entering the remainder of the building. The main kitchen, 9 by 12 meters, is separated from the distributing hall only by low counters and hot plates. On the southeast side of this hall is the dishwashing room, 5 by 6 meters, and the dishes' storage room, 3 by 5 meters; on the northwest side is the breakfast kitchen, 5 by 7 meters. These spaces were planned as one large open area to facilitate operation, supervision and maintenance. The larder, 4 by 6 meters, with refrigerators, faces due north and can be entered from the main kitchen and breakfast kitchen through a small insulated entrance hall. As an exception to the rule adopted of maintaining only one entrance for the whole building,

a separate kitchen entrance was provided. The immediate supervision of the kitchen centers in the kitchen office adjoining the distribution hall.

A system of open communications has been followed in the kitchen space, affording various advantages, such as airiness, ease of supervision, prevention of noise and clatter and avoidance of stuffiness and of undue heat. Vapors, steam and kitchen odors are carried off by large ventilating shafts, each of 1 square meter area and rising at least 2 meters above the highest part of the kitchen wing. Gas ranges and baking ovens were placed in niches, 2.5 by 5 meters, along the walls and were provided with large ventilating hoods. The steam tubs were placed under similar hoods forming a part of the kitchen roof. The food for the patients will be transported in heated carriages to the elevators adjoining the hospital entrance and from there distributed over the different floors. The food for the nurses is taken to the service room opposite the elevators and adjoining the nurses' dining room on the main floor.

It will be noted that all domestic activities such as laundry, kitchen, maintenance work and the like are confined to the basement and the ground floor, without interfering in any way with the hospital and home routine.

The mortuary department was required to be part of the building and for obvious reasons was planned on the ground floor, at the coolest side. Situated on the northeast side in the shadow of the kitchen wing, the mortuary is invisible from the hospital and is close to the main entrance. It is isolated from the heat of the surrounding building by double walls and by a double ceiling, suspended from the main floor, thus providing an air space all around these rooms, with the exception of the floor which separates them from the unheated bicycle storage space in the basement. Heat conduits of any sort, heating pipes and ducts in the vicinity of the mortuary are carefully avoided.

The Mortuary and Dispensary

The mortuary suite has five cubicles, each 2¼ by 4 meters, and a reception room, 5 by 8 meters, all of which are entered from a common corridor with a separate entrance. This arrangement provides additional separation from the building. Connected with the mortuary suite is a room for the pathological service. Communication with all parts of the building is supplied by a stairway and an elevator to all floors, adjoining the mortuary and, with a view to the funeral services, close to the chapel.

The dispensary, on the ground floor at the right of the main entrance, consists of two examination rooms, a dark room, a diathermy room, a waiting room, toilets and lavatories for nurses and patients separately, and utility space. The dispensary is used by different physicians, connected with different sick fund organizations, each for a certain number of hours a day.

At the end of the wing to the right of the main entrance is the home for retired deaconesses.

What the First Floor Is Like

The stairway and elevator near the main entrance and those near the mortuary suite lead from the bicycle storage space in the basement to the different floors of the nurses' home. It may be of interest to note here that bicycles are still used extensively in Holland as the accepted means of personal locomotion. The described arrangement is therefore of practical use for the homecoming Sisters.

The operating department on this floor is directly above the clinics department. Between the operating suites and the hospital wing, on the northeast side, we find various examination and treatment rooms, such as the orthopedic, the gynecologic and the ultraviolet ray, with their waiting and dressing rooms. On the opposite side of the corridor are the offices of the house physician and the head nurse.

The chapel is across the corridor from the operating wing. It is divided by an imaginary line into two sections; the main aisle seats 168 Sisters and their guests and the side aisle is arranged to accommodate fifteen patients in wheel chairs or in beds, which can be wheeled in from the hospital side. The main entrance to the chapel opens on the corridor toward the nurses' home.

The operating department is a complete unit within itself. Its central corridor leads to the two main operating rooms, each 5 by 7 meters, the one septic, the other aseptic, each with direct north light exposure and provided with a surgeon's wash room, 3 by 4 meters, and a sterilizing room for instruments, 3 by 4 meters. Between the latter two are the instrument cases. The aseptic operating room is also equipped with a skylight.

Adjoining the operating rooms are the anesthesia room, 3 by 5 meters, on the north side, and the sterilizing room for bandages and dressings, 3 by 5 meters, on the south side. Both rooms also communicate with the central corridor. The anesthesia room communicates with the nose, throat and ear operating room, 3 by 4 meters. The department further has an orthopedic operating room, 4 by 5 meters, and an ophthalmic operating room, 3 by 5 meters, a doctors' dressing room with a bathroom and lava-

tory, a nurses' utility room, a maids' utility room, nurses' toilets and on the south side a bandage room, 4 by 7 meters, with an adjacent bandage storage room, 3 by 4 meters. The nurses' utility room communicates with a loggia and a balcony to provide for the airing and drying of bandages and dressings regardless of weather conditions. This room is also equipped with a drying stove.

Separated from the operating department and the various treatment rooms, there are on this floor thirty-two nurses' rooms. Central to these rooms and above the main entrance is the nurses' classroom. The remaining eighty-eight nurses' rooms are on the second and third floors of the nurses' home; the third floor also contains sixteen servants' rooms, each for two servants. Only six of the nurses' rooms are double.

Each floor has four bathrooms for nurses with adjacent showers each with a separate entrance, three large service closets with hopper sinks, allowing liberal storage facilities for all sorts of household equipment, such as stepladders, buckets and racks, and, as a matter of course, an ample number of toilets and lavatories both for nurses and servants. The servants' bathrooms are on the third floor. Both floors have two or three large loggias for the cleaning and airing of wearing apparel, bedclothes and the like under all weather conditions. All nurses' rooms are equipped with two closets, one with shelves and the other with hooks and hangers.

Planning for the Future

In the planning of the building, the matter of extension was carefully provided for.

The hospital facilities could be practically doubled by building a wing, similar to the one already described, at a distance of about 40 meters south of the present one, thus accommodating from 350 to 400 patients instead of 164. In this event, or in case the deaconesses' activities expand in other directions with new demands on their already multifarious duties, the nurses' home would be extended southwestward. The home for retired deaconesses in that case would be moved to the end of the new wing or a separate new unit provided for them. Extension of the nurses' home northeastward is considered out of the question, as a special effort was made to guard their well deserved time of rest by having their rooms look out over the large, quiet, gardens instead of on the clinics, kitchen and operating wing and its attendant disquietude. Exposure to such sources of disturbance as the sudden brilliancy of the operating rooms at night in case of emergency operations, the noise of vehicles and the clatter of dishes has been carefully avoided.

The basement extends under the entire building. Next to the main entrance is the entrance for the nurses' bicycles; it is equipped with a stairway of gradual pitch with a grooved ramp alongside. On each side of the storage space for the nurses' fifty bicycles are stairways and elevators to all floors of the nurses' home. Another bicycle storage space is provided, on ground level, for the use of other personnel and of visitors.

What the Technical Services Include

The stairway to the nurses' bicycle storage also leads to the technical services which include the following: a boiler room with three boilers of 75 square meters each of heating surface, and space for a spare. At one side of this are the coal storage cellars with a capacity for an entire heating season; at the other side is the control room or valve room for the steam heating and the hot water supply. This control room also houses various motor driven pumps, remote control heat regulators, hygrometers and combustion control apparatus. Adjoining on one side is the space for the building's own private water supply with its suction and pressure pumps, water treatment plant and regulating devices; on the other side is the switching room for the electric power and light installation with the main switchboard and the auxiliary switchboard for the converter set of the direct current supply. A stairway leads directly from these control rooms to the office of the chief of the technical services on the ground floor.

The walls of the pump room for the fresh water supply are heavy brick and every precaution has been taken to prevent the propagation of sounds through tanks and pipes.

Next to the switchboard room is the storage battery room. Near by are the machinist's and fitter's shop, the electric shop and the shower baths, lavatories and toilets for the technical personnel. These facilities have been placed as far from the hospital as possible; the noisiest were arranged under the main entrance. Extra precautions were taken to prevent noise from these departments reaching the nurses' home.

Beyond these utility spaces a series of large basement rooms, with a clear height of 3 meters from floor to ceiling, and reserved for medical purposes, reach as far as the hospital basement. Among the anticipated uses of these spaces are various medicinal baths.

The basement rooms under the kitchen wing on the north side are arranged for food storage purposes; these rooms are grouped into a large unit, insulated against heat penetration and in addition isolated from the remainder of the build-

ing and the central corridor by an extra corridor. No pipes, conduits, cables or other heat sources enter this section. The rooms on the south side are arranged for the storage of stone and glassware.

Near the stairway on the same side, and directly under the x-ray department is the film storage room. No pipe or cable connection enters this room. Artificial light is only available by the use of an extension cord and plug with the switch outside the room. Daylight enters through a large outside window with perforated glass panes, protected from the penetration of direct sunlight by solid louvers. Permanent ventilation takes place by a draft chimney with a large hood, ending in syphon shape to prevent foreign objects from being thrown down. As a further precaution against the penetration of heat from the building double doors are provided, one behind the other, each insulated with sound absorbent material and protected on the exposed sides, inside and outside of the room, with sheet steel.

Under the kitchen itself are the boilers for the supply of hot water to the kitchen and to the operating suite, together with those for heating the operating suite during the night.

The basement under the hospital wing is used only for the installation of pipes and conduits to keep any sounds from reaching the sick rooms.

All basement corridors, with the exception of that in the food storage cellar, are used to accommodate the various pipe lines, cables, conduits and drains. Repairs are thus made readily without causing any disturbance in the building itself.

Why Are Flowers Removed From the Sickroom at Night?

Why it seems to be a universal practice in hospitals to remove vases of flowers from the sickroom at night is explained by a hospital authority in the *Journal of the American Medical Association* to which an inquiry on the subject was addressed.

"There is a certain psychologic effect on the patient in seeing flowers wither and there is a beneficial psychological reaction in most instances when, after a night's rest, fresh flowers, or flowers that are apparently fresh, are brought into the room to lend a little color to the patient's surroundings," the reply says. "The procedure of removing flowers from the patients' rooms at night, and returning them in the morning is a rather beneficial one, from the patients' standpoint."

The *Journal* says: "It is difficult to give any definite reason why the removal of flowers from the sickroom at night has become an institutional routine. The statement of one hospital superintendent that carbon dioxide is liberated is apparently not correct. Living plants absorb carbon dioxide and give off oxygen. It is doubtful whether cut flowers do this to an appreciable extent; and even if the cut flowers did decay, the amount of carbon dioxide liberated would have practically no effect on the ratio of carbon dioxide to oxygen in the air of the room. Generally the flowers are removed to a warmer room at night rather than to a cooler room, so that the preservation of the flowers is not an argument. Furthermore, if the odor of flowers is bad for the patient at night, it would seem logical to assume that it would also be bad for the patient in the daytime."

Improving Case Records in Illinois' State Hospitals

A complete, authentic record of every patient in the hospitals for mental cases that Illinois conducts is to result from the installation of an improved form of individual case records now under way at the institutions, according to Rodney H. Brandon, director, Department of Public Welfare.

To provide a thorough life history of each patient, with frequent notes of progress in their physical and mental condition, A. L. Bowen, superintendent of charities, has issued instructions to the managing officers of all mental hospitals to the effect that the records of the inmates will be improved and standardized.

Details for the files of information that will bear upon the condition of each patient have been worked out. In accordance with the new regulations, progress notes of all the patients will be required upon the following schedule: for new patients, upon admission and twice during the first week, then weekly for the first month.

The first complete physical examination, to be made within three days following the patient's arrival, must be placed before the institution's medical staff within three or four weeks. During the first half year, monthly examinations are required, and thereafter, semiannual examinations.

The case records, which will give the history of each patient's progress, will also contain all details that are of interest to relatives of the patient. They are to be kept in such shape that all facts of interest will be readily accessible and clearly understood, in accordance with instructions issued.

What an Experienced Dietitian Means to the Small Hospital

By MAUDE A. PERRY
Dietitian, Everett General Hospital, Everett, Wash.

A department devoted to the discussion of problems confronting both the dietitian and the administrator, conducted by Anna E. Boller, Central Free Dispensary at Rush Medical College, Chicago

THERE are so many types of smaller hospitals that no one inflexible standard for the dietary department would be practicable for all.

The well endowed private hospital, in its enviable position, can frequently maintain a dietary department vastly superior to that possible in a public or semipublic private hospital of equal size with no endowment and with an income at no time sufficient to meet operating expenses. Small hospitals cannot be grouped in a general classification recognizing size only. An industrial hospital handling surgical cases mainly does not as a rule demand as much therapeutic dietetics as does a general hospital of the same size, but much of the administrative dietetic routine may be similar. The small hospital staffed with graduate nurse service only does not have the same duties for the dietitian or dietitians as an institution of similar size having a nurses' training school. Many routine duties, however, might be identical.

Why the Work Must Be Individualized

Thus, standardization in the organization of dietary departments in all small hospitals would be impossible. Individuality of institutions as well as of personalities is always more desirable than having the work done with clocklike precision regardless of community needs. Visions and theory are valuable in their spheres but the practical must never be sacrificed to the theoretic or visionary concepts until they too have been proved workable. Until an individual has had first-hand experience in a small hospital, she is not in a position to solve dietary or other problems peculiar to such an institution. It would be as absurd for the hospital to attempt to outline university administration as for any university to attempt to promulgate a plan for hospital administration. In some cases, however, where these two organizations have been able to work together, the dietary department as well as other branches of the hospital has developed in ways distinctly beneficial to the patient and to the community, as well as to the hospital and its staff and personnel.

Duties of the Small Hospital Dietitian

In practically all small institutions the dietary department has complete charge of purchasing. It issues all foods used in the institution, plans menus, prepares and serves food to both patients and personnel, employs and supervises all employees in that department, selects and purchases the necessary equipment, renews kitchen and dining room supplies, supervises all therapeutic dietetics and instructs patients in need of various dietary régimes. In hospitals having training schools, the dietitian, besides being a member of the hospital staff, is a member of the training school faculty.

In hospital administration, the dietitian is one of the newcomers, so she must possess tact as well as ability if she is to be successful in her work. She must be cooperative. Frequently less harm can be done by an inefficient dietitian with an able staff of assistants in a large hospital than by an incompetent person in the smaller institution having only one or two dietitians.

Too often the smaller institution pleading necessity, ignorant of the economic as well as the professional advantage to be gained by employing capable workers, seeks a dietitian, usually inexperienced, who can be obtained for a smaller

salary. Since the dietetic department controls such a large percentage of the necessary expenditure of hospital funds, this false economy is expensive. Recently two hospitals of less than fifty beds that have added dietitians to their organizations have reported a monetary gain for their institutions of more than twice the salaries paid the dietitians. In both cases these dietitians were experienced university graduate dietitians.

In many hospitals of about 100-bed capacity, with a good dietary organization, there is as much or more work for one person as in a hospital of twice the size where the duties are divided among two or more dietitians, a purchasing agent, a steward and a storekeeper. Planning menus and ordering supplies for about 250 patients and the attendant personnel do not vary so much from the work of the same type carried on in the 100-bed institution. It is difficult and often impossible for one dietitian to give uninterrupted service without someone to assist or relieve her. If she is thorough and conscientious she suffers and the hospital suffers through her. It is more difficult to obtain experienced and capable workers for the smaller institutions, in many cases, either because the wrong persons have been engaged and have made dismal failures of the undertakings, or because the position has not received the recognition it merits, or because so many persons prefer to work as part of an organization that can definitely allot specified duties to each member of its personnel.

Handling All Phases of the Job

In most small hospitals salaries that are not commensurate with the work and responsibility of the position also act as a deterrent. In the larger organization, the dietitian may choose to work as an administrative, therapeutic, educational or social service dietitian; in the smaller institution she must be able to handle all phases of dietetics. In some of the smaller institutions the housekeeping has been included in the duties of the dietitian, and two dietitians instead of one dietitian and one nonprofessional person have been employed. This has proved to be satisfactory. In some cases this has also relieved the superintendent and in others the superintendent of nurses of housekeeping duties.

The dietetic department in many hospitals stands in a position similar to that of the nursing department in its earlier development. Many of the leaders of the nursing world can recall experiences, far from pleasant, through which they passed before they attained their present enviable position. In some hospitals, however, dietetics has advanced almost by leaps and bounds.

Besides her work in the hospital with which she is connected, the dietitian should be interested in professional or other activities outside of the hospital that will be advantageous both to the hospital and to herself. She must thoughtfully consider the plans or suggestions of others, taking advantage of those that may enable her to work more efficiently and discarding those of no value to her organization.

Dressing Up the Tray for Easter and St. Patrick's Day

March, with its St. Patrick's Day and Easter, offers opportunities for attractive tray decorations.

Several interesting tray markers and favors that have been used by Emma K. McCormick, dietitian, Westmoreland Hospital Association, Greensburg, Pa., are described here.

The favor for St. Patrick's Day is made by pasting two stickers together on the end of a toothpick, which is stuck into a marshmallow, and floated on the top of a cup of cocoa. These favors might also be used to decorate such desserts as ice cream, puddings and cakes. On trays where such desserts are limited, the bread or even the pats of butter

may be festively "dressed up." There are many St. Patrick's Day stickers to be had, most of which fit together, back to back, and may be used as described. In the case of stickers that do not match, such as that of the Easter duck, they may be attached to the toothpick by means of a little strip of paper on the back. Other appropriate Easter stickers will be found in the form of chickens, rabbits or a wide variety of flowers.

Nut or jam cups with a sticker to match the favors add to the attractiveness of the tray.

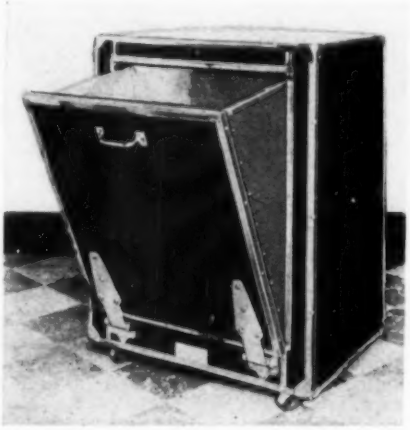
Quieting the Utility Room

By CHARLES F. NEERGAARD
New York City

NOISE is an acute hospital problem. The patients' plea for silence is becoming ever more insistent. In New York City the Noise Abatement Commission reports sixty-nine hospital superintendents as stating that traffic noises are appreciably retarding the recovery of their patients. Thirty-four go so far as to say that their patients are seriously injured by noise.

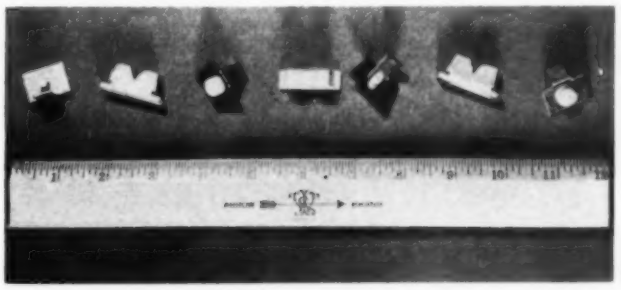
The commission's inquiry dealt with outside conditions only. It has made no report on those inside the hospital, but tests in other types of buildings—residences, offices, factories—disclose that the predominating sources of annoyance come from within, from conversation, movement, machine operation and office equipment. The same unquestionably applies to noises occurring within hospitals.

The control of disturbing noise in buildings has passed from the theoretical stage to that of a practical and exact science. Corrective quieting methods are rapidly coming into general use. For hospitals the suppression of noise, outside and in, is both profitable and imperative.



This cracked ice refrigerator is silenced by the use of rubber gaskets.

The patient goes to a hospital anticipating an atmosphere of peace and quiet in which he may recover. Yet one of the most common criticisms from the patient after he has left the hospital is concerned with disturbing noises, many of which he feels were unnecessary and inexcusable. Several previous papers[1] have suggested types of construction and acoustical materials and equipment most appropriate for hospitals to keep outside noises out and to absorb and limit those originating in the building itself. This article describes a number of simple and inexpensive ways that have been devised to silence and muffle certain clamorous hospital equipment and apparatus so that noises from many heretofore prolific sources may be stillborn.



Silencing bumpers that can be used for metal cabinets are illustrated here—round ones for shelves and rectangular ones for door jambs.

An analysis of complaints made by patients indicates three chief sources of annoyance; slamming doors, the noise from which may be eliminated when modern hospital hardware is used; the din of the floor diet kitchen, which may be effectively banished by central food service and dishwashing; the constant hubbub that is heard in the utility room.

A Disturber of the Peace

The utility unit has long been the worst disturber of the peace on the patients' floor. It is the center of many activities. Here are assembled the mechanics of the care of patients—sterilizers, sinks, storage cabinets, basins and pitchers, all of metal, and the noisiest assortment of utensils and equipment imaginable. Nurses constantly pass in and out to empty a bedpan, fill an ice pack, dispose of a soiled dressing. Almost everything they touch, however careful they may be, gives off a resounding clang. The room, with its tile walls and floor, magnifies every sound, which the door, swinging open, passes along the corridors for the full benefit of all patients in the neighborhood.

It is unfortunately true that most of the mechanical equipment introduced in recent years, while

[1]How to Achieve Quiet Surroundings, THE MODERN HOSPITAL, March, 1929; What It Costs to Quiet a Hospital, THE MODERN HOSPITAL, April, 1929; Are Acoustical Materials a Menace to the Hospital? THE MODERN HOSPITAL, August, 1930; Practical Methods of Making a Hospital Quiet, Catholic Hospital Association Conference, 1930; Correct Hardware Eliminates Noise, Hospital Management, February, 1931.

making less labor for the nurses, has made more disturbance for the patients. The automatic bedpan washer materially simplified an unpleasant task but increased the noise factor many times. The pan itself, whenever touched, resounds like a drum. As the nurse puts it into the washer, metal clashes against metal. When she places it in the sterilizing rack, there is further din. When the rack with its five pans is lifted in and out of the sterilizer the rattle and bang that are heard are insufferable.

Means and Methods

Several years ago I spent many weeks as a hospital patient in a room directly opposite the utility, and became impressed with the urgency of finding some way of quieting the work done there. The suggestions here outlined are the result. They represent the joint efforts of a number of manufacturers and superintendents who have cooperated in many experiments.

The automatic bedpan washer can be quieted at the expense of a few cents. As shown in the illustration, the prongs that hold the pan are covered with ordinary rubber tubing. Scrap material, worn in other service, will suffice. Stock crutch tips slipped over the pegs effectually insulate the pan from the shelf. One extra peg must be tapped in the surface of the door, a short job for the handy man. The results of these simple applications are surprising.

The bedpan rack is the noisiest offender of all and presented for a long time an insurmountable problem. The first thought was to make it of something other than metal. A series of experiments were carried out with various new materials as they came on the market, such as fibers and compositions, but none proved practical because of difficulties in fabrication, excessive cost or failure to stand up under frequent exposure to live steam. With nonmetallic materials eliminated, some effective method of insulating the metal itself had to be found. Racks wound with adhesive tape demonstrated that insulation would work. The tape, of course, was short-lived. A little over a year ago a new electro rubber plating process was found by which a thin coating of soft rubber could be deposited on metal. The manufacturer was not particularly sanguine as to the permanency of the rubber if used in a steam sterilizer. The process promised such good results in terms of quiet, however, that it was felt to be worth trying. A rack was plated, entirely covering all parts of the metal with rubber.

The laboratory tests made extended over two months' time. The rack was subjected to live steam at pressures ranging from 40 to 50 pounds for varying periods of from three to fifteen minutes, with intervals between for cooling, for an aggregate of over 300 hours, exclusive of the cooling intervals. This, it is estimated, is the equivalent of between two and three years of use under normal hospital conditions. The plating was examined frequently as the test proceeded, and at the end of the period showed no signs of deterioration or hardening. The rubber, so far as could be determined, was in as good condition on the completion of the test as it was when it was first applied.

All rubber will harden and otherwise deteriorate in time, but we are led to believe both from the experience of the laboratory tests on the original sample and from the results of a number of trial racks which have been used for several months in active service, that the rubber covering will last for several years or long enough to represent a sound investment paying liberal dividends in quiet. Enthusiastic reports have been received from the superintendents who have been using the new insulated racks.

Even the waste can can be silenced by installing chair bumpers at the top and the bottom and by winding the handle with adhesive tape.

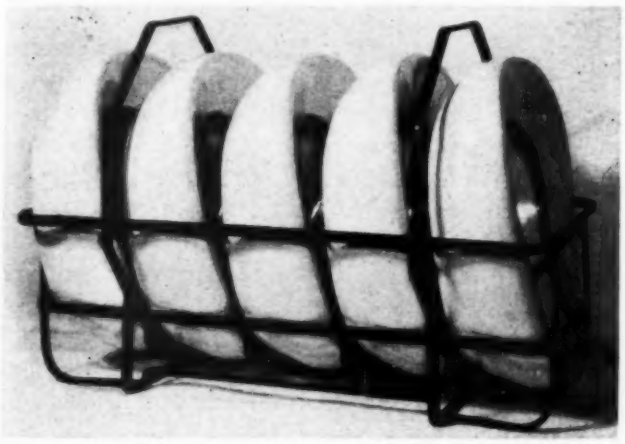
A New Bedpan Rack

Unfortunately many old type racks cannot be plated, as the added thickness of the rubber does not leave enough space between the cross members for the pans. A new rack has been designed of somewhat lighter metal which will fit into the standard 24 by 14 by 17-inch bedpan sterilizer, so that hospitals wishing to take advantage of this improvement need replace the rack only. Incidentally urinal racks may be similarly plated and made less noisy.

With a little care, the slamming covers of utensil, instrument and bedpan sterilizers can be made to close quietly if the oil check valves which raise and lower them are properly adjusted.

Another constant "racketeer" in the utility room is the galvanized iron waste can. The scraping of

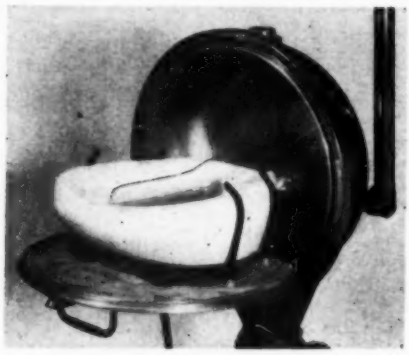
this can across the tile floor as the porter takes it to and from the elevator, the clang as the lid is put off and on, are reminiscent of a boiler factory. Often because of the noise, the lid is left off and the unsavory contents exposed. A simple and inexpensive method of quieting these cans has been



This metal bedpan rack is practically noiseless because it is entirely plated with rubber.

evolved. Four stock rubber chair bumpers are riveted on the bottom and four on the inside of the top rim, projecting slightly above it. The latter have to be trimmed down a little to permit the regular size of cover to slip over them. To complete the job, the handles are wrapped with adhesive tape. Here again the hospital handy man can do the work. The bumpers cost about a dollar a set.

The cracked ice storage box is another offender. A noiseless type has been produced with rubber gaskets protecting both the front and back of



The bedpan washer can be insulated with rubber tubing and crutch tips.

the pan from striking the frame. The insulation is highly effective and is standard for many new boxes. Boxes long in service may be successfully muted by one or another type of bumper or gasket.

New hospital buildings are being generally equipped with metal cabinets and dressers which manufacturers are producing in standard units at a cost but slightly higher than that of wood. The increased expense is more than justified by the better appearance and saving in upkeep, since wooden cabinets invariably require constant adjustments because of shrinking, swelling and warping. But with the metal the same problem of noise has to be overcome. A number of different forms of rubber bumpers have been devised and are being widely used. The rectangular bumpers, one inch long, form a cushion against which doors and drawers strike noiselessly. The small rubber button inserted in the shelf supports produces surprising results in subduing the resonance when bottles, utensils and instruments are laid on glass or metal shelves.

Noncorrosive metal and stainless steel are being used increasingly for counter tops and drain boards. These are more satisfactory than wood from every standpoint except that of noise. When solid metal of heavy gauge is used for these purposes, the noise factor is serious. If a lighter gauge metal is backed with wood or steel, with a sheet of insulating material between, the first cost is less, sounds are deadened and there is little if any sacrifice of durability.

The patient has long been noise conscious. Those who plan and care for him are fast becoming so. No new hospital building can be termed modern unless all reasonable precautions are taken to ensure quiet. Almost everything described in this paper can be applied to the hospital's present equipment by its own employees. The cost is slight and the cumulative effect will make utility room noise conspicuous by its absence.

Dental Care of Hospital Patients

Dr. K. F. Hoffmann, Munich, Germany, in an article in *Zeitscrift für das Gesamte Krankenhauswesen,* emphasizes that the tasks of the dentist in the hospital should include the treatment of acute teeth and mouth diseases, which may not be connected with the chief illness but which have an unfavorable influence on its cure. The dentist's assistance is also necessary in removing boils from the jawbone and the tongue. Certain general illnesses, inclusive of diseases of the heart and illnesses of the nervous system, are connected with teeth in need of treatment. Also, in the many auto accidents that occur, bones of the face are frequently injured, making special treatment necessary. The tasks of the dentist in the hospital are many sided and important.

Smaller hospitals should enlist the services of a local dentist, but for large hospitals only officially employed dentists with special dental training should be considered, and they should have their own dental department. The investment for space and instruments is small.

Editorials

Exit the Hospital Politician

A GREAT evil never exists without its accompanying good. The past few months of financial stringency have brought to an end the orgy of spending of the public's money in which politicians of all dimensions find themselves so much at home. The coffers of the people are practically empty.

Throughout the land there is a great scurrying for sheep's clothing with which these lupine individuals now seek to adorn themselves. The cause of the people is now the chief concern of these political meddlers. The hospital maintained by public money must be saved at all costs. Economies must be brought about, but the cause of the sick must be protected. Thus is the blatant announcement of these selfish individuals who formerly demanded patronage and jobs at the hands of the hospital.

The purging of pay rolls is at all times a splendid patriotic practice. If ever the occasion were opportune for the directors of large public institutions to rid themselves of political parasites, now is the time. Politicians dare not protest with the same aggressiveness they would have displayed in other days. The public hospital, while suffering otherwise from the scarcity of public funds, will surely benefit from the present economic condition in this respect.

Sanctum Sanctorum

IN DESCRIBING the office of the hospital administrator one might use for comparative purposes many literary figures of speech. Thus, it might be described as the hub of the hospital with power of its own for bringing into play certain centripetal and centrifugal forces in its daily relations with the distant wards that lie on the periphery. It might also be described as the nodal point on which all hospital eyes, normal and pathologic, are focused. To make the picture more clear, however, a description of the equipment that such an office requires should be of help.

The comfortable desk chair is usually of the swivel variety, representing an evolutionary development from the earlier models that were used by those persons in authority, each one of whom was entitled to refer to himself in the plural. The desk stands between the administrator and his guest. Underneath should be found the convenience of a large trash basket. The importance of the carpet could hardly be exaggerated, and the administrator who is overcome with the influence of interior decorating as an art (and which one of them is not?) might indeed select a number of color schemes to suit the particular purpose it will serve; thus, a green color scheme might be used for those youthful individuals whose errors are due to ignorance of hospital rules. Yellow as a predominant color would serve for those timid ones who fear to make decisions and accept responsibility in emergencies. Red has obvious uses and so has blue. Purple might be in style for the stubborn whose "mental eye will not react either to light or to accommodation" after the value of a postmortem examination on a near relative has been patiently explained.

A few colored pencils should be handy—blue for the administrator whose friends insist he has editorial capacities and red for checking the enthusiasm of department heads who do not sympathize with him in his efforts to balance the budget. A pair of red glass spectacles should help the administrator see black figures in the ledger in their proper color, though this may not always be necessary. Inside the desk a few trial balloons might be stored for those administrators who are addicted to experimental habits.

Some authorities think that a trapdoor under the chair of the administrator would be a convenience, to save him from embarrassment under certain conditions, while others think that such a trapdoor might better be placed under the chair on the opposite side of the desk. A special file should be maintained consisting of three parts identified as follows: (1) "Routine Correspondence"; (2) "Humorous Incidents" that arise in the course of a day's work and (3) "Letters Dictated But Not Sent," all of which have their obvious uses. The walls should be white, a reminder of the infallibility of the administrator. The room should be soundproof and thermostatically controlled. On the walls a few pictures might illustrate the purposes of the office, the subjects depending on the character of the institution and its relation to the patient. A painting showing the crossing of the Red Sea might serve to remind those who enjoy the hospitality of the office that the race is not always to the swift nor the battle to the strong.

These recommendations for the equipment of headquarters should be of particular use to those administrators whose principles of office etiquette

prescribe that interviews should never be conducted in the territory of department heads. They are intended, however, as suggestions only and have especial significance in parlous times like these when the administrator of a hospital needs all the sympathy that he can win for himself.

Weekly Fire Drills

FORTUNATELY few disastrous institutional fires occurred in the United States during the past year. This fact is more likely due to the fact that the hospital never sleeps than to the existence of adequate provisions for handling this hazard to life. To be sure, the organization of an effective fire drill is most difficult in the hospital. Patients must not be alarmed by the clanging of gongs nor can any drills in the moving of the sick to safe quarters be thoroughly performed. Yet the emptying of the nurses' residence by drill can be as efficiently done as in any other institution.

Drill teams may and should be organized in the acute departments of the hospital. Instructions as to the closing of windows, doors and other draft producing apertures, the prevention of panic and the moving of beds along predetermined routes can and should be the subject of frequent drills. Weekly tests should be given in the emergency handling of fire situations. To heed warnings as to the danger of hospital fires may be life saving; to fail to do so is to continue to dwell in a veritable fool's paradise.

Are Base Hospitals Feasible?

IN WAR times it is not possible to provide proper hospital facilities at or near the lines of combat for the performance of major surgery and for the subsequent care of those who are seriously wounded. Ambulatory patients may be properly treated in dressing stations which are not far removed from the front. At the hospital base a complete equipment of apparatus and instruments is always present and the treatment of the sick and wounded can there be more deliberately and effectively undertaken.

In the civilian hospital system, for reasons entirely different, institutions vary greatly in physical and personnel equipment. The small hospital, poorly endowed and equipped, for years may have more or less successfully waged a fight for existence against almost insuperable odds. All praise to those institutional heroes who do not know the meaning of failure! But a new economic and social era is dawning. The public has learned to expect of the hospital the application of all the newer methods of diagnosis and treatment. To undertake these procedures presupposes the presence of costly apparatus and a trained personnel. Gradually the clientele of the rural hospital is gravitating toward the city institution where equipment is more modern and physicians are more highly specialized.

The days of the small unendowed institution appear to be numbered. In its place, many believe, will be found a substation of a stronger and wealthier institution where emergency service will be rendered and preliminary advice and treatment given. Such a plan would doubtless be feasible, and under proper geographical conditions would work no hardship to the patient. This is a day of amalgamation and reorganization. No insurmountable difficulties to the adoption of these principles in some degree are presented in the case of the hospital.

Doctor, Hospital and Company

IT IS probable that the majority of physicians practicing in hospitals would favor any proposition that contemplated the collection, by the institution, of the fees due them from patients they had treated therein.

Most hospitals, however, shun to participate in the collection of fees due the physician. Perhaps, in the long run, the adoption of such a policy is wise. Some hospitals, on the other hand, assume somewhat of a paternalistic attitude toward the physician and in reality profit from his labors not only from a scientific angle but also in a monetary way. Such announcements as those which state that consultations with a distinguished staff surgeon may be arranged at the hospital office suggest strongly that either the physician is on a full-time salaried basis or that the hospital is sharing in the fee thus earned. If it were possible for a flat rate to be decided upon that would include not only hospital care but also the fee of the physician, the financial dilemma of the patient would be somewhat less complicated.

There is a regrettable lack of standardization of physicians' charges. Because of this fact, there appear, from time to time, rumblings of discontent and suspicion among the members of the community who have required medical aid. It cannot be understood why in one instance the patient is charged a hundred dollars for a service for which another patient pays but ten. This is a problem that is difficult even for the physicians to solve. In the care of the middle class patient greater strides have been made toward reaching

a satisfactory standardization of physicians' fees than in any other type of work. It is not a difficult task for hospitals catering solely to this class of patients definitely to fix charges covering the services of both the doctor and the nurse. When this can be done, there appears to be no reason why the hospital should not collect both its own bill and that of the physician.

Unless a definite charge is made for office space in the hospital, for the institution to make engagements for the physician and to collect for its own use a portion of the fee smacks strongly of commercialism. Under ordinary circumstances it is probably best for the financial affairs of the hospital and the physician to be kept separated.

Fair Play

IN MANY cities it has been the custom for those duly elected to supervise the expenditure of public funds to appropriate on a lump sum or a per diem basis, funds for the care of indigent patients in private hospitals. Usually such grants have been inadequate and have served only slightly to lessen the burden of the free load which these institutions have been asked to bear.

In searching for ways and means by which public expenditures might be conserved, the eyes of budget officers have come upon those items of expenditure that are necessitated by grants to private institutions. Then, because it has always been felt that private philanthropy will continue indefinitely to meet the deficits of nonpublic institutions, the amount of money appropriated to them by public officials has been decreased. In a large city in this country where the expenditure necessary to conduct a public hospital is approximated at $5 per day per patient, the municipality has been accustomed to appropriate only $3.50 per day for the same purpose to private hospitals. It is now proposed in the interest of economy to decrease by 15 per cent this amount which is already too small. A protest from all the private hospitals in the community has been the result.

Private hospitals, except from a moral standpoint, are not obligated to wreck themselves financially in the treatment of indigent patients. To be sure, as large a free load as possible should be carried, but the financial potentialities of each institution should be the governing factor in determining the size of this load. When a reasonable limit of expense incurred by the treatment of free cases has been reached, the private hospital is fully justified in demanding recompense from tax funds or in refusing further ward admissions until additional funds have been obtained.

The Mollusk

THE administration of a narcotic is aimed to produce a certain surcease from the annoyance of pain. It removes the recipient from the realm of unpleasant realities that surround him. Those who continually resort to these agents become fearful of the time when they must face a world full of annoying details.

Occupying the same hospital position for too long a time frequently has a strong narcotic effect upon the superintendent. Such a superintendent fears to initiate new but helpfully radical moves because of an uncertainty as to their outcome. He hesitates to oppose the opinions of staff or board members because he does not desire any unpleasantness, and is tempted to sacrifice his convictions to the more practical problem of prolonging his tenure of office. He deteriorates into a veritable mollusk. He awaits the opinions of others before formulating his own. Moreover, there are many boards of trustees which will tolerate only this type of an executive. Although they are not informed as to the details of hospital administration, they do not permit or approve either the selection or unhampered functioning of one who does. As a result, new executives appear on the scene with kaleidoscopic rapidity.

Too frequent change of position is neither advantageous for the hospital nor for the executive. But when, because of board interference, progress is not being made, the superintendent must choose between leading a life of pacificity and ineffectiveness or moving to another post.

Not Less But Wiser Giving

TIME was when almost any type of glittering word picture was capable of quickly opening the private and public purse. Golden fishes fairly swarmed to the appeal of the most clumsily disguised bait.

Today the appeal must possess first of all a real merit. There must be aroused in the mind of the donor a zeal for service and this can be accomplished only if cold substantiating facts are forthcoming. No more do an attractive letterhead and an inactive board of governors produce results. The wealthy and benevolently inclined public has not ceased charitable acts. Its representatives, in reality, are continuing generously to contribute to worthy efforts while firmly rejecting those of less merit. Thus hospitals in many places have been the recipients of generous support while other social and semimedical activities have died of economic inaction.

Practical Administrative Problems:

A Code of Sterilizing Technique

THERE have appeared in previous issues of this magazine two articles in which were set down the results of a questionnaire sent to 125 hospitals in this country covering the methods adopted in carrying out both the preparatory steps and the surgical procedures employed in the treatment of patients in wards and operating rooms.

The first of these articles dealt largely with the preparation and after treatment of surgical patients. The second largely concerned itself with sterilization methods as practiced throughout the surgical field. The group of hospitals surveyed consisted of institutions of all sizes, which were scattered geographically.

That the executives of these institutions were interested in the results of this questionnaire is evidenced by the fact that so large a number of them not only replied promptly but also requested that they be informed concerning the findings of this study. Five questionnaires, however, were directly answered by operating room nurses, although it is suspected that in many more instances the superintendent simply signed the study sheet when it was returned to him from the department of nursing.

Extensive Research Is Needed

One superintendent stressed the fact that here was an opportunity not only for studying the practices of institutions generally, but of producing a real piece of research work as to the actual potency of chemicals employed in sterilization. That such a bit of experimentation would extend far beyond both the scope of this article and the scientific resources of THE MODERN HOSPITAL, should appear evident to all. Much chemical research is necessary, and the expenditure of many thousands of dollars unavoidable in the manufacture and testing of one antiseptic agent alone. That THE MODERN HOSPITAL could actually test the potency in destroying germs of such agents as mercurochrome, metaphen, alcohol, compound solution of cresol, phenol and iodine is of course impossible. Adequate bacteriologic evidence is at hand, however, to guarantee at least the test tube efficiency of these chemicals, in greater or lesser concentration, in destroying organisms in reasonably definite periods. It is therefore possible to describe only the handling, the preparation and the sterilization of gauze products and the aseptic-izing of instruments and solutions as practiced in the group of hospitals studied. It is the purpose, however, of this final article to discuss practical measures by which institutions may utilize the information thus supplied them.

Why Methods Should Be Standardized

The questionnaires revealed the following:

1. A state of chaos exists in hospital practice as to the methods that are employed in carrying out many of the everyday surgical procedures in the hospital. Nursing manuals describe in great detail a majority of the everyday practices necessary in caring for patients. The making of beds, the administering of hot packs and enemas and the preparation for intravenous injection of glucose and salt solutions have been fairly well standardized as to the methods taught and employed in the various training schools in this country. There are, however, no such generally accepted practices in the nursing care of the surgical patient.

2. A great variation exists in every type of service rendered to the patient in the course of preparing him for an operation as well as in his treatment thereafter. Less variation exists, it is believed, in the actual surgical steps that are taken by the physician. For example, a Bassini operation, a McBurney incision, a Kraske rectal operation and the surgical steps usually adopted in the amputation of a breast, all are rather definitely governed by anatomic constants.

3. The avoidable expense to the hospital, represented by wasted time and material, due to confusion in performing the type of surgical work described, is enormous.

4. Because of confusion of techniques and also because the efficacy of many of the steps adopted rests entirely upon hearsay evidence, the danger of delayed convalescence, if not actual loss of life, to which the patient is exposed is considerable.

5. A real need exists for the compilation of a surgical manual covering methods of sterilization and fully describing basic steps in technique. This should come not from the builder of sterilizers nor from the manufacturer of drugs but from the surgical field itself.

The reader of this concluding article may well inquire, if the foregoing statements are true,

"What can be done about it?" What administrative remedies are at hand to meet an admitted need? How can some practical application of the information that has been supplied be brought about? It is proposed now to discuss in a concise manner the methods by which the various interested parties, if they are willing to submerge a false personal autonomy and cooperate for the good of the hospital, can bring about an improvement in the present situation.

Why the Board Should Intervene

The board of trustees of the hospital should first be interested in such an attempt, if it can be proved that the safety of the patient is in any way jeopardized by the present slipshod methods and that equally good care can be given him with less expenditure of money. The surgeon is inclined to intimate that whether he is careless in the use of surgical supplies or whether he unreasoningly insists on his prerogative to follow an individual technique are matters that concern only him and not the board of trustees. The time is fast approaching when the somewhat autocratic tendencies of hospital surgeons must give way to the trustees' conclusions that too great a danger and expense lie in recognizing an individualism that will make no compromise. If, for example, a hospital of 300 beds is required to spend annually an average sum of $2,500 for catgut, why should the members of the board not feel that they are justified in requiring economies in the use of this article? By the exercise of care, it should be possible to save from 10 to 15 per cent of this total outlay annually. To make, as a routine, two ties from one length of catgut would certainly more than bring this about.

If gauze is expensive, as it is, and hundreds of thousands of yards are required annually by a hospital of 500 beds, is it not the concern of the board of trustees to economize in the use of the public's money by requiring the surgeon to work out a technique that makes possible this result? Is it not the concern of the board of trustees if patients are kept awake all night in preparation for an operation, because the surgeon fails to notify the ward supervisor of his intentions until too late in the afternoon for the day force to perform this work? Should the board of trustees heed, if an avoidable infection delays a patient's discharge and requires two weeks' extra care in the ward, at a cost of $4 a day? Is it unreasonable for the board of trustees to object if standing orders are not in use, and three or four days are lost before treatment is begun, each day requiring the expenditure of a considerable sum for board and incidentals? Does it reach beyond the interest of the surgeon if faulty preparation studies are made and pneumonia or nephritis follows the administration of ether, and many days of anxiety and expense result? The board of trustees surely should be interested if sterilizers are not effective and dressings are infected or if, because of lack of knowledge of a proper technique, a disastrous explosion occurs, and even though human life is spared, the hospital receives unfavorable notoriety.

If this article reaches the eyes of board members, they may naturally inquire of the superintendent of the institution as to the present status of surgical technique employed in the local hospital. It should not be unexpected or unusual for the executive to be asked for a report on the methods employed and an order issued for some attempt to be made to standardize surgical and nursing techniques. The board of trustees, thus becoming interested in inaugurating such a study, assumes the responsibility for it, and the executive staff and nursing force are in duty bound to comply whole-heartedly.

The superintendent of the hospital can make some use of the information supplied, by first learning, if he is not already fully informed, concerning the details of the conduct of the operating room, for example, as daily carried on by the nursing staff. The superintendent of nurses is often left too much alone in this respect. She may or may not be efficient. It has long been recognized that neither a starched cap and uniform nor the degree R.N. appended to her name guarantees nursing efficiency. The methods employed in the past in building up a hospital technique have smacked too much of the ancient Chinese system —of an unreasoning willingness to continue along beaten paths because institutional ancestors were content to do so. The reduction of morbidity and mortality figures and economy in the spending of hospital funds certainly should actively concern the superintendent of the hospital. Too frequently the administrator allows himself to be diverted from acquainting himself at first hand with the methods employed in the handling of such details as have been mentioned in the foregoing studies. He should not be continually willing blindly to delegate the performance of important duties to subordinates without knowing at least basic facts relative to every hospital practice.

Details the Superintendent Must Know

The conduct of the central supply room, the bacteriologic testing of sterilizers, the ultimate destination of the hundreds of bolts of gauze issued from the storeroom and the methods employed in the preparation, sterilization and counting of sponges are all matters that the wide-awake hospi-

tal superintendent at some time investigates. He should not take for granted that sterilizers, though impressively polished, are properly functioning or that though mechanically perfect they are being efficiently handled. If every superintendent in the hospital field were asked how recently a bacteriologic test had been made of sterilizer efficiency, some might find it difficult to answer. Indeed, the written records of such studies might be difficult to locate. Furthermore, not every executive has given careful thought to the most efficient methods by which salt solution and sterile and distilled water may be prepared and distributed.

Equipment Should Be in Perfect Order

A great variation was noted in the questionnaires returned from the more than six-score hospitals interviewed as to the length of time employed in the sterilization of gauze and linens. The attention of executives should be forcibly directed to the fact that whether thirty minutes or twice this time is necessary for sterilization depends largely upon whether air discharge and steam distribution are proper and prompt during the period of time in which goods to be sterilized are being exposed to heat. It is the duty of the superintendent to be personally certain that the sterilizer functions properly. If it does, an exposure of its contents to 15 pounds' steam pressure for thirty minutes should be adequate. A higher pressure than this is inclined to produce an excessive heat which is destructive to hospital goods.

Furthermore, in institutions where oil is employed as a sterilizing medium, the danger of reinfecting instruments following sterilization, because they must be handled in cleansing them after they have been boiled in an oily medium, is very real. The superintendent might even direct the carrying out of certain practical studies which will prove the efficacy of some definite technique for use in his own institution. If 20 pounds' pressure for thirty minutes, for example, is found to be sufficient to sterilize, let this technique be adopted and let there be no variation. If instruments are repeatedly found to be sterile after twenty-five minutes' boiling, let this technique be definitely followed. Surely there is no rational excuse for boiling instruments to be used in bone operations thirty minutes and those for an appendectomy twenty minutes. Such practices reflect no serious consideration of basically scientific facts underlying these procedures, and simply prove that steps are often taken for no better reason than that they have always been thus carried out.

From a practical standpoint, a lay or even a medically trained superintendent sometimes finds it difficult to lay down and to require compliance with definite orders covering surgical technique. He is, however, justified in calling upon the staff as a whole or on an organized committee representing the staff to work out such recommendations. If no action is taken, and this often will be the case, he may secure from outside his institution a full description of techniques as they are carried out elsewhere. By submitting such statements to the staff, and calling upon its members to amplify or to alter these rules of action, he may secure results when otherwise he would be unable to do so.

The superintendent of nurses is responsible for the education of the members of her school and she is, or should be, greatly concerned in providing that this instruction be sound and complete because her graduates, going to other institutions, will prove creditable or will fail to command respect in the same measure as they are properly trained. She is responsible for the prompt and effective carrying out of the day's work. Her nurses do as they are ordered by the physician. She is also concerned, however, with providing proper nursing treatment for patients and with seeing that every possible comfort is provided during the patients' stay in the institution. She cannot, with complete freedom of conscience, follow orders that she deems improper. If she does, she becomes *particeps criminis* if ill befalls the patient.

The Nurse's Part

It may be asked what the nurse can do to hasten the adoption of proper surgical practices. She should first of all unhesitatingly uphold the superintendent in all his efforts to improve the care of the patient. She should be willing to study the current trends and should endeavor to derive from them suggestions for improvement. She cannot hold herself aloof and, figuratively, hide behind an improvised screen of passive acquiescence to the doctor's orders. If nurses are inefficient and waste time because of confusion as to accepted methods in the performance of their work, educational standards will suffer. The conscientious directress of nurses, therefore, should be deeply concerned with the present state of confusion surrounding the preparation and surgical treatment of patients.

Upon the staff falls the chief responsibility for the existence of the absurd conditions which were here and there revealed by the study being discussed. No effective move can be made without the cooperation of staff members. Autonomy is a dangerous word when applied to the justification of an unreasonable individualism on the part of

the surgeon. If staff members can be aroused to the need for improvement, the superintendent will find that his work will be greatly simplified.

It cannot nor perhaps should it be required that any rigid standardization be adopted in the treatment of private patients. The hospital should recognize the right of the surgeon to practice whatever recognized scientific methods he desires in the treatment of this type of patient. On the other hand, in the case of the ward patient, it might appear that the hospital has stronger regulatory rights. In the matter of the preparation of the surgical patient for operation it seems that the board of trustees, through the superintendent, should require that the fewest possible steps be taken by the nurse in safely making this type of patient ready for surgical treatment.

Securing the Staff's Cooperation

A questionnaire might be sent to the surgical staff, and upon the receipt of the replies a compilation of the results in the matter of standardization might be discussed at a meeting of all its members. The adoption of a procedure by the majority of these present should determine the one to be practiced. There is no greater or more desirable virtue next to scientific skill than that of pliability. The surgeon often takes refuge behind the statement that he is responsible for results and, hence, should not be required to perform his work in any given way. On the other hand, one frequently observes a splendid surgeon who secures good results by the employment of methods so simple and commonplace that by comparison the surgeon who is inclined to add mystery to his work appears ridiculous. The day of the kitchen table operator has long passed, and it is well that it has. The modern operator, however, who cannot perform a laparotomy without many assistants and much apparatus has much to learn from his surgical ancestors. A staff committee might even be appointed to submit suggestions for a standardization of operating room techniques.

The color, length, cut or material of operating room gowns, while perhaps representing a matter of individual taste, does not after all concern the patient or, in reality, seriously affect his chances for recovery. More important to him, it appears, is the question as to whether masks should cover the whole face or only the mouth, or as to whether organisms may not be borne by particles of moisture emanating from the nose as well as from the oral cavity. More interesting to the patient, it seems, is the question of whether the insides of gloves are properly sterilized or whether a wet surgical sheet is not more likely to transmit to the operative field organisms from improperly sterilized skin surface beneath, than one which is dry. Whether the nurse dresses the surgeon or whether he himself dons his gown appears to be a matter of individual taste not of any great interest to the patient. Whether sponges made from half a dozen thicknesses of gauze or of much less or more pieces of material, or whether they are an inch or more or less larger or smaller in size, is not particularly disturbing to the patient about to subject himself to a laparotomy.

The point that should be remembered is that good surgery depends upon the individual and upon the practice of the basic laws of aseptic technique. It does not depend upon adding to the work of the operating room staff a great variety of minor details interesting only to the surgeon and having no direct bearing upon the patient's chances for recovery.

The public has some interest also in this matter. It has a right to require that its representatives are safely, quickly and as comfortably as possible returned to health. It should demand that the money it provides is wisely expended. It should not countenance a catering to the whims of the members of the hospital family unless it can be proved that the foregoing objects are favored by so doing. The public demands results with the least expenditure of money. The board of trustees, being the agents of the public, have a duty to perform in meeting these expectations.

Hospitals should no longer go blithely forward, practicing a surgical technique that is too complicated or too haphazard and that is subject to standardization, though no effort has been made to bring this about. A manual of hospital procedures should be the goal toward which each institution should aim. Every party of interest has a responsibility toward bringing this about. Perhaps of all these persons the members of the staff have the greatest obligation to meet in this respect.

Another Hospital Accords Flat Rates to Maternity Patients

Our Lady of Victory Benedictine Hospital, Kingston, N. Y., is reported by *Health News* as having joined the ranks of those hospitals that are granting flat rates to maternity patients. A fee of $50 is charged for a ten-day stay in the hospital. This fee includes hospital service, delivery room charges, care of the baby, dressing and the service of the physician during clinic visits and confinement. The hospital adopted this system to encourage better prenatal care.

NEWS OF THE MONTH

Use Civilian Beds for Veterans' Care Is Plea at Medical Congress

DR. RAY LYMAN WILBUR, secretary of the interior, declares that building of Government hospitals has gone far enough and that the erection of additional facilities for veterans will result in thousands of empty beds later.

Doctor Wilbur was the opening speaker at the twenty-eighth Annual Congress on Medical Education, Medical Licensure and Hospitals, held under the auspices of the American Medical Association at the Palmer House, Chicago, February 15 and 16.

Scores of distinguished medical educators and hospital authorities from widely separated sections of the country assembled for the meeting, the participating organizations being the council on medical education and hospitals of the American Medical Association, the Federation of State Medical Boards of the United States, the Council on Physical Therapy of the American Medical Association and the American Conference on Hospital Service.

Doctor Wilbur stated that in the United States we have, roughly, $3,000,000,000 of capital invested in hospitals. "Broadly speaking, the public owns the hospitals," he said. "As a group it is impossible for them to succeed as ordinary business institutions. Only certain private hospitals that are specially favored can operate with some small profit." "It seems to me," Doctor Wilbur continued, "that the Government has built enough veterans' hospitals, and that with the large number of available civilian beds in every part of the country, some plan for their more complete use should be worked out rather than to increase the already enormous capital expenditure in this field. The practice of medicine must still center around the patient, not around the bureaucratic administration of a physical institution."

On Tuesday morning the entire session of the American Conference on Hospital Service was devoted to a symposium on the care of the veteran, when the problems arising from the Government's hospitalization plans for veterans were thoroughly discussed by representatives of interested organizations. The principal speakers were: Dr. H. H. Shoulders, Tennessee State Medical Association, Nashville; Paul H. Fesler, president, American Hospital Association; Edward A. Hayes, National Rehabilitation Committee, the American Legion; Dr. Hugh Scott, Veterans' Administration Hospital, Hines, Ill. The general discussion was taken part in by Doctor Wilbur, Dr. Charles A. Elliott, Chicago, Dr. Charles B. Wright, Minneapolis, David Shillinglaw, Chicago.

It was pointed out that there are thousands of veterans in need of hospital care for injuries not inflicted in warfare, who cannot be cared for in Government institutions which are already overcrowded. On the other side of the picture are more than twenty-eight thousand beds in civilian hospitals which could be used for the care of these men if the law could be amended to make possible the hospitalization of men with nonservice disabilities in civilian hospitals.

Doctor Caldwell Is Opposed to Paternalism

Following Doctor Wilbur on the Monday morning program was Dr. Bert W. Caldwell, executive secretary, American Hospital Association. He feels that in spite of criticism pronounced against them, the public has confidence in hospitals and no longer regards them as places "where people go to die" but as places of amelioration and hope. In relation to physicians, Doctor Caldwell said that the hospital is the handmaiden of modern medicine. It is the laboratory in which medical science is advanced and medical art perfected. In no other place have the facilities been assembled by which practitioners of modern medicine are able to give the patient efficient and satisfactory care.

Doctor Caldwell brought up the question as to whether the number of hospitals has reached the saturation point in the United States. He suggested that communities which are already adequately supplied should be discouraged from establishing new institutions, but should perhaps

NEWS OF THE MONTH (Cont'd)

enlarge the bed capacities of those which have shown themselves to be worth while.

The speaker disapproved "intrusion of Governmental paternalism in our institutions."

The hospital as the medical service center of the community was sketched by Dr. C. Rufus Rorem, Julius Rosenwald Fund, Chicago. Doctor Rorem advocated that physicians make greater use of the hospital's equipment in their office practice. Physicians, hospitals and patients would all benefit greatly if hospitals were used in this way, Doctor Rorem believes. The physician would have available the professional personnel and the scientific apparatus and he would have frequent contact with other physicians whose judgment or services he might need.

Problems in nursing education were discussed by Dr. W. S. Leathers, dean, Vanderbilt University School of Medicine, Nashville. Nursing education has lagged behind medical education and hospital service, he said. A large percentage of the 200,000 nurses in the United States received their training in a hospital training school. "The nurse is the only person, so far as I know, who is expected to pay for her education by the services she renders in a hospital," the speaker declared. An encouraging development in nursing education, he said, is the establishment of university schools of nursing on a par with other university departments.

Eminent Speakers Discuss Mental Care

On Monday afternoon hospitals for the treatment of mental patients were under discussion. The topics and the speakers were as follows: Integration of Universities and State Hospitals in Handling Mental Diseases, Dr. W. F. Lorenz, University of Wisconsin, Madison; Advantages of Complete State Care for Mental Cases, Dr. F. A. Carmichael, superintendent, Osawatomie State Hospital, Osawatomie, Kan.; Preliminary Report of Survey of Hospitals for Nervous and Mental Patients in the United States, Dr. John M. Grimes, Council on Medical Education and Hospitals, Chicago; Private Care of Nervous and Mental Patients, Dr. G. Wilse Robinson, Kansas City, Mo.

On Tuesday afternoon physical therapy in hospitals for veterans was discussed at a joint session of the council on physical therapy of the American Medical Association and the American Conference on Hospital Service. The subjects considered were physical therapy in army hospitals; occupational therapy; importance of adequate records in physical therapy departments. Those who presented papers were: Major General Robert U. Patterson, surgeon general, United States Army; T. B. Kidner, New York City; Dr. Willis S. Peck, University of Michigan Medical School, Ann Arbor.

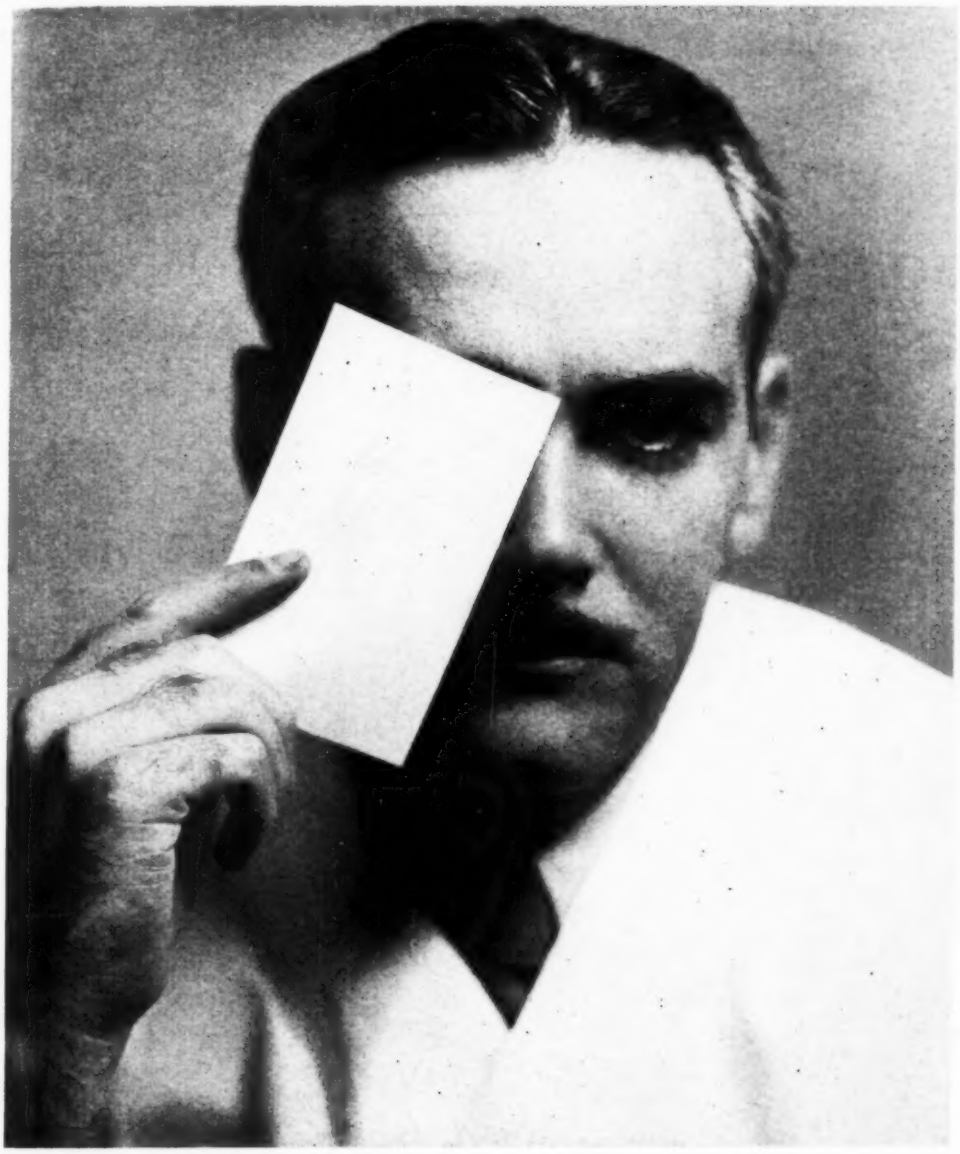
Crowded Sessions Feature Nursing Meeting in Chicago

The Central Council for Nursing Education held its third annual institute for lay boards of directors of hospitals and public health nursing organizations at the Palmer House, Chicago, February 15, concurrently with the Annual Congress on Medical Education, Medical Licensure and Hospitals. Morning and afternoon sessions were held, when full programs were presented and the luncheon speaker was Dr. E. P. Lyon, dean, University of Minnesota Medical School, Minneapolis.

Doctor Lyon's subject was "The Crisis in Nursing." He emphasized and reiterated that nursing is a form of medicine and that every nursing problem is a medical problem. Nurses and doctors are co-workers, dependent upon each other, the work of the one incomplete without the work of the other. He declared that nursing is a sick profession but that although nurses are therapists and should be able to treat the sick, in this case the patient is beyond their ability to cure and needs a doctor. Doctor Lyon therefore puts the case squarely up to the medical profession and asserts that it is the job of the members of that profession to rally around the nurses and work wholeheartedly with them in solving their problem.

At the morning session a symposium on public health nursing was taken part in by Katharine Tucker, National Organization for Public Health Nursing; Dr. Herman N. Bundesen, commissioner of health, Chicago; Miriam Ames, Joint Committee on Hourly Nursing, Chicago; Edna L. Foley, Visiting Nurse Association, Chicago.

In the afternoon the supply and demand in nursing was discussed by Emilie G. Sargent, Visiting Nurse Association, Detroit; Ella G. Best, National League of Nursing Education; Dr. Malcolm T. MacEachern, American College of Surgeons; M. Helena McMillan, Presbyterian Hospital School of Nursing, Chicago.



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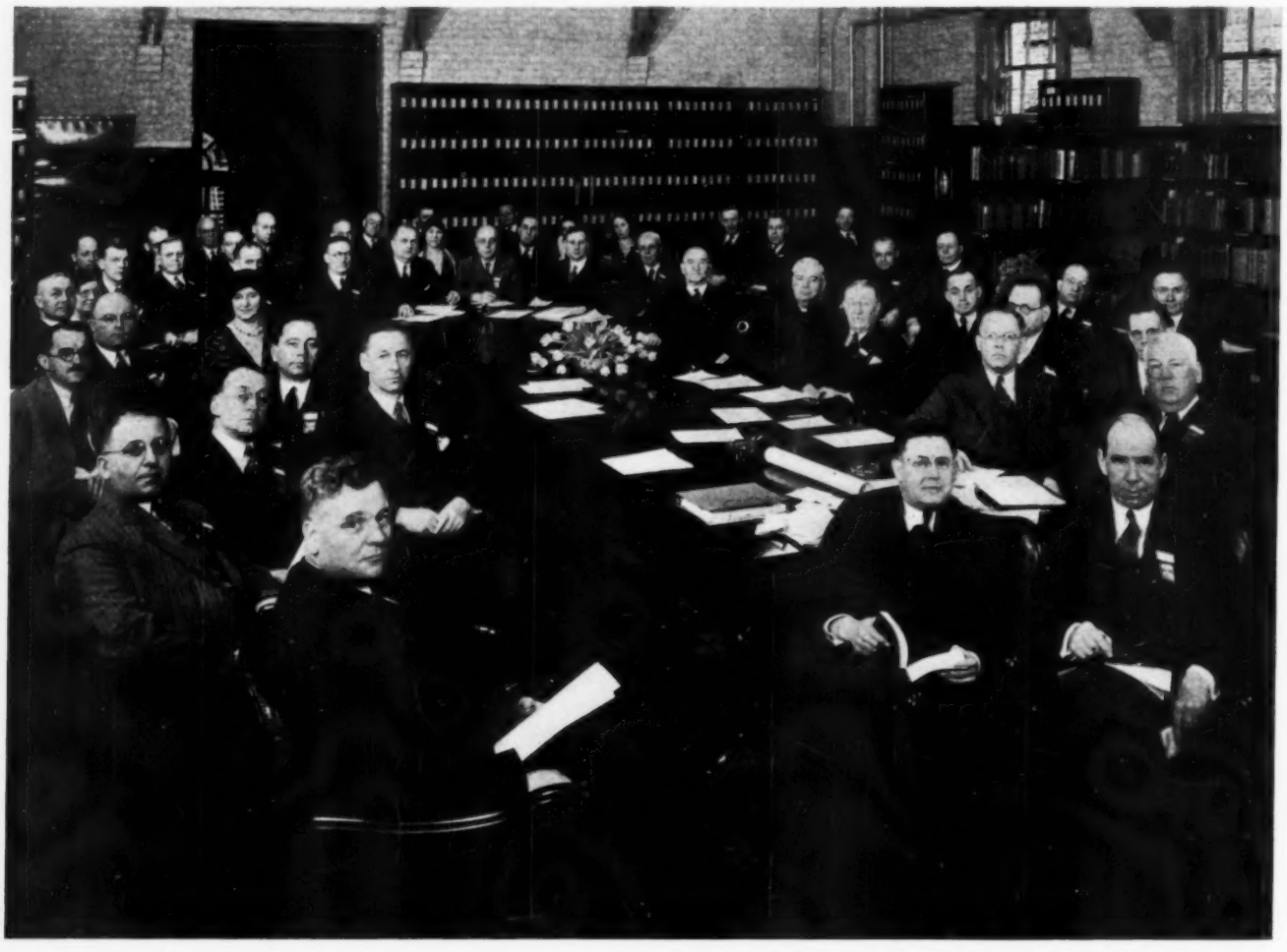
NEWS OF THE MONTH (Cont'd)

State Heads Set March 15 to Check on Veterans in Hospitals

THREE sessions, all of them of more than three hours' duration, were held on Monday and Tuesday, February 15 and 16, in Chicago, at which time the presidents and representatives of most of the state and sectional hospital associations conferred with the trustees of the American Hospital Association on ways and means whereby each could be helpful to the others.

The matter of the use of vacant beds in civilian hospitals for the hospitalization of the nonservice connected veterans of the country was discussed at great length. Under the guidance of Paul Fesler, president, American Hospital Association, definite steps have been taken by which it is hoped that some agreement will be reached between the Government and the civilian hospitals of the country, and that within the near future many former soldiers will be hospitalized in hospitals nearer their homes than the existing Veterans' Bureau hospitals and that the Veterans' Bureau hospitals will be left free to care for the service connected veterans of the country.

Dr. B. W. Black, medical director, Highland Hospital, Oakland, Calif., and formerly the admin-



When the presidents and representatives of the state and sectional hospital associations met with the trustees of the American Hospital Association at the A. H. A. headquarters, Chicago.

NEWS OF THE MONTH (Cont'd)

istrator of a Veterans' Bureau hospital, stated that in his opinion the civilian hospitals should proceed with great caution toward the operation of such a scheme and that while the idea was of course laudable in every respect it would be better to select a few hospitals at first where veterans might be treated.

Suggestions From Ohio

The first session of the presidents' meeting was held on Monday afternoon in conjunction with the meeting of the board of trustees, American Hospital Association, with President Fesler presiding.

Last spring the Ohio Hospital Association called upon the American Hospital Association for a definite program of intended accomplishment and at this meeting the president of the Ohio association presented recommendations asking that the national association hire a full-time consultant on administration, make surveys of the various states to prevent the overhospitalization in some localities, establish a research laboratory where hospital procedures could be perfected and hospital equipment reported upon, appoint a permanent legislative committee to work toward a standardization of all laws pertaining to hospitals, issue a standard statistical report whereby all hospitals could supply the A. H. A. with information and thus eliminate many of the questionnaires now sent out, establish an organized publicity department to combat unfavorable newspaper and magazine publicity now current, and establish a uniform plan of geographic sections of the A. H. A.

Other suggestions for the association were presented by the Rev. Maurice F. Griffin, Cleveland, Dr. B. W. Black, John M. Smith, Hahnemann Medical College and Hospital, Philadelphia, E. Muriel Anscombe, Jewish Hospital, St. Louis, Lee C. Gammill, Baptist State Hospital, Little Rock, Ark., John Mannix, University Hospitals, Cleveland, Asa S. Bacon, Presbyterian Hospital, Chicago, Dr. George O'Hanlon, Jersey City Medical Center, Jersey City, N. J., Carl P. Wright, General Hospital of Syracuse, Syracuse, N. Y., Dr. James A. Hamilton, Mary Hitchcock Memorial Hospital, Hanover, N. H., Guy J. Clark, Cleveland Hospital Council, Dr. Frank C. English, executive secretary, American Protestant Hospital Association, and others.

More than sixty persons attended the banquet that was held in the evening at which the American Hospital Association was host to the state representatives. Many speakers were present including the Rev. Alphonse M. Schwitalla, president, Catholic Hospital Association, Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, and others. Paul Fesler presided.

The American Hospital Association was also the host and the representatives of the states were the guests at a luncheon held at the Palmer House on Tuesday. The matter of the veterans' hospitalization was thoroughly discussed at the time as also were other subjects of interest.

It was decided at this meeting that all states should make a check of their members to find out how many veterans were in the hospitals on one day, March fifteenth, and whether or not the disabilities were in any way connected with injuries received while in the service of the Government.

South Plans Sectional Meeting at Memphis

What promises to be the largest state or sectional meeting that has ever been held in the South is scheduled for April 18 and 19 at Memphis, Tenn., when there will be a joint meeting of the Kentucky, Tennessee and Arkansas Hospital Associations, with hospital superintendents from Alabama and Georgia invited to attend.

Preparations are being made to make this an outstanding event, with an excellent program and speakers from all parts of the country. Economic conditions and their cure will be stressed at the meetings, and attention will be given to the many hospital problems peculiar to the South.

Strong Program Planned for Tristate Meeting

The program committee for the Illinois, Indiana and Wisconsin meeting has arranged what appears to be the strongest program that has ever been presented at this tristate meeting which has been scheduled for April 27, 28 and 29 in Chicago.

Ample exhibit space has been arranged for and a special committee has been appointed to see that the meeting hall, the exhibits, the auxiliary rooms and the food are to the satisfaction of everyone present. No time or effort is being spared to make this the best attended meeting in this section.

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NEWS OF THE MONTH (Cont'd)

Methodist Association Votes to Remain a Separate Group

A RESOLUTION that the National Methodist Hospitals, Homes and Deaconess Association would be of more benefit to the Methodist Episcopal Church as a separate association than if it were made a subsidiary of the home missionary department of the church was unanimously passed at the fourteenth annual convention of the Methodist Hospitals, Homes and Deaconess Association held in Chicago, February 10 and 11.

Many speakers discussed the subject when it was brought to the attention of the delegates on Thursday morning. A movement has been on foot for economic reasons for the home missionary department to take over in effect the work of the hospitals, homes and deaconesses, but it was felt that this would be a mistake, and the resolution so states. This practically assures that there will be no combination of the two departments until at least the next general assembly of the Methodist Episcopal Church, when the matter will probably again be brought up.

Attendance Was Large

Contrary to expectations, the attendance at the meeting this year was larger than any that has been held in several years past. The hospital and allied institutional superintendents realize that there was greater need for frank discussion of conditions this year than ever before, and at the close of the meeting all were in agreement that it had been very much worth while.

President John G. Benson, associate superintendent, Methodist Episcopal Hospital, Indianapolis, presided at the opening meeting, which was inspirational in character. After devotions and singing by a glee club from the Beth-El General Hospital, Colorado Springs, Colo., addresses were given by Dr. John Thompson, pastor, Methodist Temple, Chicago, by the Rev. John G. Benson, by Bishop Edgar Blake, Indianapolis, and by the Rev. Charles C. Jarrell, secretary, General Hospital Board, Methodist Episcopal Church, South, Atlanta, Ga.

Group conferences were held in the afternoon. The conference pertaining to hospitals was under the chairmanship of the Rev. G. T. Notson, superintendent, Methodist Hospital, Sioux City, Iowa. Excellent phases of economic conditions in hospitals and economies that must be effected were presented by the following leaders in hospital work: the Rev. John E. Lander, Wesley Hospital, Wichita, Kans.; the Rev. O. J. Carder, Missouri Methodist Hospital, St. Joseph, Mo.; Dr. C. S. Woods, superintendent, St. Luke's Hospital, Cleveland; Dr. J. S. Harkness, Mitchell, S. D.; the Rev. Bascom Robbins, Kansas City, Kans.

In the evening the annual banquet was held, which was much enjoyed by all.

On Thursday morning Dr. C. Rufus Rorem, Julius Rosenwald Fund, Chicago, gave an address entitled "Middle Rate Plans for Hospital Patients," and Paul Fesler, newly appointed superintendent of the Wesley Memorial Hospital, Chicago, and president of the American Hospital Association, addressed the convention on the work that was being done in regard to the Veterans' Bureau controversy. Another inspiring address was given by the Rev. John A. Diekmann, president, Bethesda Hospital, Cincinnati, on "The Future of Methodist Philanthropies." The Rev. N. E. Davis, secretary, Board of Hospitals, Homes and Deaconess Work, Columbus, Ohio, also spoke on this subject.

Nerve Surgery Is New Specialty at Presbyterian Hospital

A department of neurosurgery has been established at Presbyterian Hospital, Chicago. Dr. Adrian Verbrugghen, formerly of the Mayo Clinic, Rochester, Minn., will head the new department.

Special operating tables, delicate surgical instruments developed for brain operations in recent years, and all the other equipment necessary for brain, spinal cord and nerve operations have been installed at the hospital.

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NEWS OF THE MONTH (Cont'd)

Midwestern Hospital Social Workers Meet in St. Louis

The Midwestern regional conference, American Association of Hospital Social Workers, was held in St. Louis, February 5 to 7.

Appearing as speakers on the first day's program were: Mary Ratterman, Vanderbilt University Hospital, Nashville, Tenn., who spoke on "The Division of Responsibility Between Hospital Social Service Departments and Community Agencies for Case Work Problems"; Evelyn Andelman, University of Chicago Clinics, whose subject was "The Diagnostic Process in Medical Social Case Work"; Elizabeth Nairn, director of social service, Massachusetts General Hospital, who discussed "Medical Reports to Cooperating Social Agencies." The speaker at the general session in the evening was Ida M. Cannon, chief of social service, Massachusetts General Hospital, Boston. She discussed in full the recommendations of the White House Conference on Child Health and Protection.

Those who took part in the second day's program included: Dr. Harry L. Alexander, associate professor of medicine, Washington University School of Medicine, St. Louis; Grace Beals Ferguson, assistant professor of medical social work, Washington University; Clare Feller, Jewish Hospital, St. Louis; Lelia Dickinson, University of Chicago Clinics; Miss Theodate Soule, Washington University Clinics and Allied Hospitals; Flora Slocum, home economist, St. Louis Provident Association; Elizabeth G. Gardiner, University of Minnesota, Minneapolis; Deborah Mac Lurg Jensen, assistant director, Washington University School of Nursing; the Rev. Alphonse M. Schwitalla, dean, St. Louis University School of Medicine.

Work on Large Negro Hospital for Chicago Is Started

Contracts amounting to $250,000 have been let for the remodeling of the old Chicago Lying-In Hospital for the Provident Hospital, in affiliation with the University of Chicago.

When the remodeling is completed, Provident Hospital will be the largest and best equipped training center for colored physicians and nurses in the world. The medical staff will be under the direction of the University of Chicago Medical School.

Admiral Norman J. Blackwood is superintendent of the Provident Hospital and Training School.

Northwest Hospital Association Meets Again

After three years without a meeting, the Northwest Hospital Association met in the auditorium of the new Harborview Hospital, Seattle, Wash., January 18. The association had formerly held a business session at the meeting of the Western Hospital Association during this time. This meeting was the result of a questionnaire sent out to the membership, whose opinion was practically unanimous that the association should hold a winter meeting. The one-day session proved to be one of the best attended and most interesting meetings the association has ever had.

The morning was given over to business and the discussion of legislative measures, including the new Oregon hospital lien act and the care of sick and disabled veterans, as presented through the questionnaire of the American Hospital Association. Live administrative problems, including both nursing and dietetics, filled the afternoon program.

The dietetic section of the Northwest Hospital Association held its business meeting in the morning. The afternoon and evening were joint sessions.

Dr. A. K. Haywood, medical director, Vancouver General Hospital, Vancouver, B. C., and J. V. McVety, secretary, British Columbia Hospital Association, were guests.

The following officers were elected: president, J. W. Efaw, business manager, Seattle General Hospital, Seattle, Wash.; vice-president, Carolyn E. Davis, superintendent, Good Samaritan Hospital, Portland, Ore.; second vice-president, Adda Knox, superintendent, St. Luke's Hospital, Bellingham, Wash.; secretary-treasurer, the Rev. Axel M. Green, superintendent, Emanuel Hospital, Portland, Ore.; trustees, Ann Fraser, superintendent, Virginia Mason Hospital, Seattle, Wash., and Sister Mary Magna, Providence Hospital, Seattle, Wash.

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NEWS OF THE MONTH (Cont'd)

Iowa Association Announces Its Meeting for March 9-10

Officers of the Iowa Hospital Association have announced the completed program for the annual meeting to be held in Sioux City, March 9 and 10.

The first general session, at which the president of the association, Robert E. Neff, administrator, University Hospitals, Iowa City, will preside, will be featured by the following speeches and speakers: "Ten Years' Operation of the Pathological and X-Ray Laboratory Service Under Full-Time Direction," F. P. G. Lattner, superintendent, Finley Hospital, Dubuque; "Hospital Rates," R. A. Nettleton, superintendent, Methodist Hospital, Des Moines; "Food Costs and the Present Economic Conditions," Dr. Kate Daum, chief dietitian, University Hospitals, Iowa City; "Hospital Legislation," T. P. Sharpnack, executive secretary, Broadlawns Hospital, Des Moines. Discussing Mr. Lattner's paper will be Clinton F. Smith, superintendent, Allen Memorial Hospital, Waterloo. Mary L. Elder, superintendent, Burlington Hospital, Burlington, will discuss Doctor Daum's paper.

A trustees' session will be held in the afternoon with John A. McNamara, executive editor, THE MODERN HOSPITAL, Chicago, presiding. "Trustees, Trust Funds and Superintendents," will be discussed by Morris Sanford, president, board of trustees, Methodist Hospital, Sioux City. "The Trustee We May Trust," is the subject of a paper that will be presented by the Rev. C. H. Kamphoefner, secretary, board of trustees, Methodist Hospital, Sioux City. Following these, Mr. McNamara will lead a round table discussion.

A feature of the evening dinner session will be the presentation of a pageant, "The History of Nursing," directed by Rose O'Connor, hospital department, Sioux City Public Library. The speaker of the evening will be Dr. W. L. Bierring, Des Moines. His subject will be "The Hospital as a Community Asset."

The second day's session will be opened by George L. Rowe, manager, Polyclinic Hospital, Des Moines, and first vice-president of the association, as presiding officer. Appearing on this program are: Muriel Anscombe, superintendent, Jewish Hospital, St. Louis, who will speak on "Economic Aspects of the Recent Developments in Nursing and Nursing Education"; Matthew O. Foley, editor, *Hospital Management*, Chicago, who has for his subject, "Recent Developments in the Hospital's Relationship to Automobile Accident Cases"; E. C. Pohlman, assistant to the administrator, University Hospitals, Iowa City, whose subject will be "Financial and Statistical Reports as an Aid to Hospital Management"; Dr. Allan C. Starry, director, department of clinical pathology, St. Joseph's Mercy Hospital, Sioux City, who will speak on "The Hospital Staff Library"; Helen Beckley, executive secretary, American Association of Hospital Social Workers, Chicago, whose subject is "Social Problems in the Small Hospital." Margaret Stoddard, superintendent, City Hospital, Newton, will discuss Miss Anscombe's paper, and J. B. Van Horn, superintendent, St. Luke's Hospital, Cedar Rapids, will discuss Mr. Foley's paper.

Following the luncheon, a motion talking picture, "Some Features in Hospital Administration," will be shown.

A round table conducted by Dr. M. T. MacEachern, director of hospital activities, American College of Surgeons, will make up the afternoon session. The session will close with the induction of the new officers.

The exhibits will be open at all times.

John B. Murphy Hospital, Chicago, Opens New Clinic

The Sisters of Mercy of the John B. Murphy Hospital, Chicago, have announced the opening of the Murphy Clinic, for the worthy sick poor. The opening was held on February 2.

Cards are issued to those who will be treated in the clinic. On one side of the card are the name and the address of the patient, together with the name of the department in which he is being treated. There is also a notation to the effect that the patient must always bring the card with him to the office. Otherwise, he will be required to pay a fine of twenty-five cents.

On the reverse side of the card the admission hours to the various departments are listed. These departments include: physical diagnosis; general medicine; general surgery; gynecology; ear, nose and throat; eye; dental; pediatrics; infant welfare; dermatology; genito-urinary; obstetrical, prenatal clinic; proctology.

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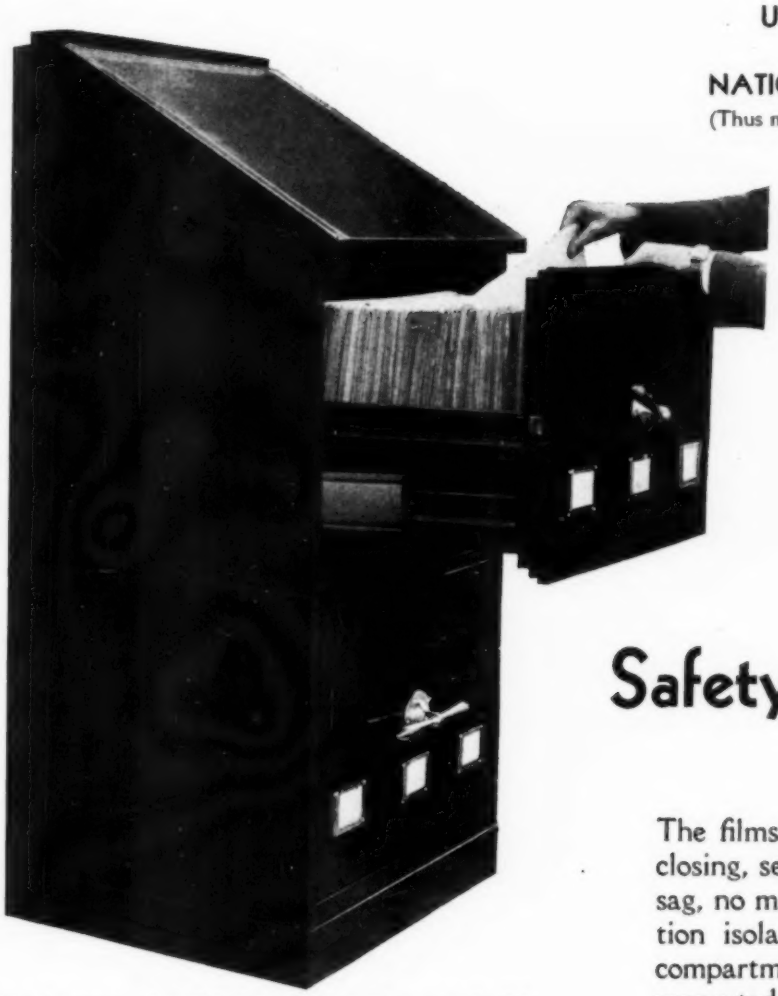

The unit construction of the Film Safe permits great elasticity in arrangement of installations to meet all conditions. The Installation illustrated above consists of two Type No. 2000 Film-Safe Units—one Type No. 1202 Hood and one Type No. 1205 Base.

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NEWS OF THE MONTH (Cont'd)

Memorial Column to World War Dietitians Is Unveiled

The unveiling of the memorial column to dietitians who served in the World War was held in the American Red Cross Memorial Building, Washington, D. C., February 6. The column was given by the American Dietetics Association.

The presiding officer at the ceremonies was Lenna Cooper, supervising dietitian, Montefiore Hospital, New York City. During 1918-19, Miss Cooper was in the dietetic service, office of the surgeon general, U. S. Army.

Speeches included: "The Overseas Dietitian," Mary de Garmo Bryan, associate in household arts, Columbia University, and overseas Red Cross dietitian; "The Future of the Dietitian," Maj.-Gen. Robert U. Patterson, surgeon general, U. S. Army; "The Red Cross in Nutrition Education," Mabel T. Boardman, national secretary, American Red Cross.

The memorial was unveiled by Mary A. Lindsley, manager, Dodge Hotel, Washington, D. C., and overseas Red Cross dietitian. The presiding officer was presented by Miss Clyde B. Schuman, national director, nutrition service, American Red Cross.

C. H. A. to Meet in Villanova, Pa., June 21-24

The Catholic Hospital Association of the United States and Canada has chosen as the scene of its seventeenth annual convention, Villanova College, Villanova, Pa., and the dates, June 21 to June 24. Villanova is near Philadelphia.

New Radium Supply Acquired by Michael Reese, Chicago

Michael Reese Hospital, Chicago, is now the owner of four grams of radium which will enlarge the services of the hospital and of the recently established tumor clinic in the treatment of cancer patients.

The clinic is under the direction of Dr. Max Cutler who points out that the increased amount of radium now available at the hospital will make it possible to give a cancer sufferer as much radiation in a fraction of the time as was formerly given by treatment with a smaller quantity.

The entire four grams will be placed in a lead container with walls four inches thick, weighing 1,500 pounds. This will be mounted on a cradle having a universal motion that will permit it to be easily adjusted to any position. A window in the under side of the lead chamber allows the radium beams to play upon the proper spot of the patient's skin.

A special unit has been constructed in the hospital to house the radium. Here the patients will be taken for treatment. It is a room constructed with a floor, ceiling and walls lined with a layer of lead one inch thick, for the protection of the workers.

New York Association Chooses May 5, 6, 7 for Meeting

The Hospital Association of New York State will hold its eighth annual conference at the Hotel New Yorker, New York City, May 5, 6 and 7.

Manufacturers of hospital products are planning for an exhibit in connection with the convention.

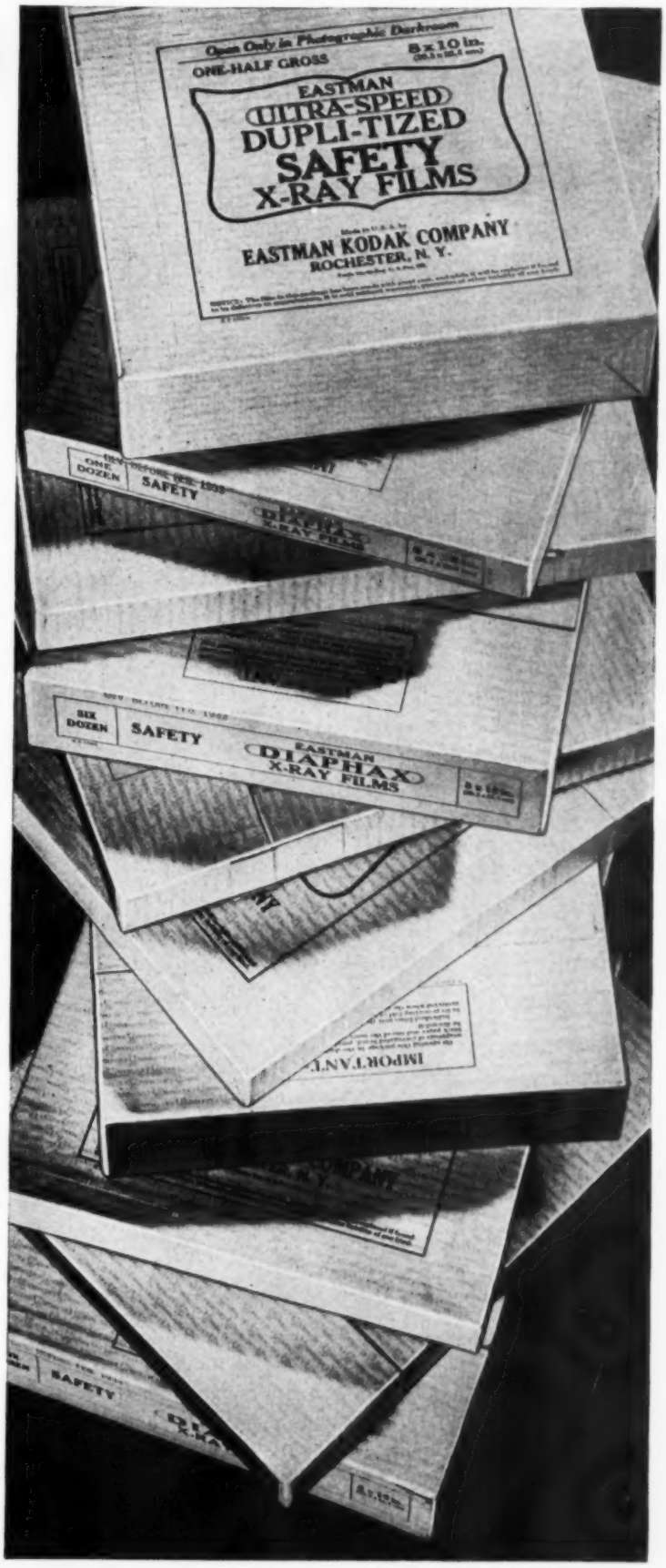
Carl P. Wright, superintendent, Syracuse General Hospital, Syracuse, N. Y., is president of the association, and Julian Funt, Beth Israel Hospital, New York City, is executive secretary.

Oxygen Therapy Progress Discussed at University of Wisconsin

A one-day demonstration and discussions of the use of oxygen and carbon dioxide as a resuscitative and therapeutic procedure were held at the University of Wisconsin, February 23.

Included in the topics discussed were: principles of oxygen therapy; signs of oxygen want; oxygen therapy in acute and chronic cases; mask administration, nasal and oral; use of soda lime; pharyngeal insufflation; apparatus, flow meters, moisture; technique of the use of catheters; insertion of catheters in pharnyx. Laboratory demonstrations were given on the physiologic effects of oxygen want. There was also a discussion of the clinical aspects of oxygen therapy followed by ward demonstrations.

10% REDUCTION IN PRICE on EASTMAN *SAFETY* X-RAY FILMS



SINCE the introduction of Ultra-Speed and of Diaphax X-ray Films only a little over a year ago, the increased use of the *Safety* base type has permitted production economies which are now passed on to *consumers* in the form of a 10% price reduction on Eastman *Safety* X-ray Film. If nitrate base film is now used in your x-ray department, this new price makes it highly desirable to change to *Safety*. If *Safety* is already used, your costs are immediately cut.

Safety films present decided advantages. The Underwriters' Laboratories, Inc., of the National Board of Fire Underwriters, have judged the hazards of these slow-burning films to be small when in use, and when in storage, somewhat less than would be presented by common newsprint paper in the same form and quantity. Thus, special storage facilities need not be expanded.

The radiographic quality of Eastman *Safety* Film is the same as that of nitrate film, the emulsions being identical. No change is necessary in exposure technic or processing procedure.

To take advantage of this saving, specify Safety base the next time you order Eastman Ultra-Speed or Eastman Diaphax X-ray Films.

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NEWS OF THE MONTH (Cont'd)

Coming Meetings

Arkansas, Kentucky and Tennessee Hospital Associations.
Next meeting, Memphis, Tenn., April 18-19.

American Association of Hospital Social Workers.
President, Elizabeth Wisner, Tulane University, New Orleans.
Executive secretary, Helen Beckley, 18 East Division Street, Chicago.
Next meeting, Philadelphia, May 14-21.

American College of Surgeons.
President, Dr. Allen B. Kanavel, 54 East Erie Street, Chicago.
Director general, Dr. Franklin H. Martin, 40 East Erie Street, Chicago.
Next meeting, St. Louis, October 17-21.

American Hospital Association.
President, Paul H. Fesler, University Hospital, Minneapolis.
Executive secretary, Dr. Bert W. Caldwell, 18 East Division Street, Chicago.
Next meeting, Detroit, September 12.

American Medical Association.
President, Dr. Edward Starr Judd, Rochester, Minn.
Secretary, Dr. Olin West, 535 North Dearborn Street, Chicago.
Next meeting, New Orleans, May 9-13.

American Nurses' Association, National League of Nursing Education and National Organization for Public Health Nursing.
Next meeting, San Antonio, Texas, April 11-16.

American Protestant Hospital Association.
President, Rev. A. O. Fonkalsrud, Mansfield General Hospital, Mansfield, Ohio.
Executive secretary, Dr. Frank C. English, Hyde Park, Station O, Cincinnati.
Next meeting, Detroit, September 9-12.

Catholic Hospital Association of the United States and Canada.
President, the Rev. Alphonse M. Schwitalla, S.J., Dean, St. Louis University Medical School, St. Louis.
Secretary, M. R. Kneifl, 1402 South Grand Blvd., St. Louis.
Next meeting, Villanova, Pa., June 21-24.

Colorado Hospital Association.
President, Frank J. Walter, St. Luke's Hospital, Denver.
Executive secretary, William S. McNary, University of Colorado School of Medicine and Hospital, Boulder.
Next meeting, Boulder, June 7.

Iowa Hospital Association.
President, Robert E. Neff, University of Iowa Hospitals, Iowa City.
Secretary, Clinton F. Smith, Allen Memorial Hospital, Waterloo.
Next meeting, Sioux City, March 9-10.

Illinois, Indiana and Wisconsin Hospital Associations.
Next meeting, Chicago, April 27-29.

Michigan Hospital Association.
President, L. J. McKenney, Highland Park General Hospital, Highland Park.
Secretary, Robert G. Greve, University Hospital, Ann Arbor.
Next meeting, Flint, May 17-18.

Midwest Hospital Association.
President, E. Muriel Anscombe, Jewish Hospital, St. Louis.
Secretary, Walter J. Grolton, Missouri Pacific Hospital, St. Louis.
Next meeting, St. Louis, June 2-3.

Minnesota Hospital Association.
President, Dr. Fred G. Carter, Ancker Hospital, St. Paul.
Secretary-treasurer, James McNee, St. Luke's Hospital, Duluth.
Next meeting, Minneapolis, May 23-25.

New Jersey Hospital Association.
President, Dr. George O'Hanlon, Jersey City Medical Center, Jersey City.
Executive secretary, Marie Louis, Muhlenberg Hospital, Plainfield.
Next meeting, Atlantic City, May 13-14.

Hospital Association of New York State.
President, Carl P. Wright, Syracuse General Hospital, Syracuse.
Secretary, Julian Funt, Beth Israel Hospital, New York City.
Next meeting, New York City, May 5-7.

North Carolina, South Carolina and Virginia Hospital Associations.
Next meeting, Richmond, Va., May 17-19.

Ohio Hospital Association.
President, Dr. C. S. Woods, St. Luke's Hospital, Cleveland.
Executive secretary, John R. Mannix, University Hospitals, Cleveland.
Next meeting, Akron, March 15-16.

Hospital Association of Pennsylvania.
President, M. H. Eichenlaub, Western Pennsylvania Hospital, Pittsburgh.
Secretary, Howard E. Bishop, Robert Packer Hospital, Sayre.
Next meeting, Pittsburgh, March 15-17.

Texas State Hospital Association.
President, Robert Jolly, Memorial Hospital, Houston.
Secretary, Joe F. Miller, Jefferson Davis Hospital, Houston.
Next meeting, Dallas, April 8-9.

Western Hospital Association.
President. Dr. B. W. Black, Highland Hospital, Oakland, Calif.
Secretary, Mrs. L. M. Armstrong, Los Angeles.
Next meeting, Salt Lake City, Utah, June 14-16.

7000 Meals a Day Well Cooked . . . . with Vulcan Equipment

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IN THE JERSEY CITY MEDICAL CENTER

Good food, well cooked, is most important in a hospital, said A. J. Kennelly, Steward of the Jersey City Medical Center, where 7000 meals are served daily.

Notice that Mr. Kennelly not only said "good food" but also "well cooked," for the proper selection of food is only half the answer.

For years Mr. Kennelly has found that Vulcan All-Hot-Top Gas Ranges have materially aided him in assuring wholesome, appetizing meals. The great number of heats of the closed top make it easy to get just the right cooking temperature for superior results. He is enthusiastic too, over the new Vulcan Radiant Surface Broiler and Bake Oven. Last but not least the economy of Vulcan equipment and gas, keeps his cooking costs down.

Jersey City Medical Center is an outstanding municipal hospital group. Its realization was made possible through the active interest of the Honorable Frank Hague, Mayor of Jersey City.

Architect John T. Rowland, Jr., designs all the Jersey City Hospitals. For years he has specified Vulcan gas ranges, bake ovens and other equipment. He knows from experience that they cost little to operate and maintain, save time, are easier to keep clean and give superior cooking results.

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NEWS OF THE MONTH (Cont'd)

Medical Institute Planned for Low Cost Patients of Philadelphia

A medical institute that will include a private hospital, clinic and physicians' offices is to be established in Philadelphia within the next year in a twenty-five story building that is now in the process of planning, according to a recent announcement.

The structure, which will cost $2,500,000, will be built by a group of financiers in cooperation with outstanding medical men of the city, and will enable a man or woman of moderate income to obtain medical treatment at a cost approximately half of that charged by a hospital.

Hospital Opens Diagnostic Clinic in Philadelphia

A diagnostic clinic has been opened at Calumet Hill Hospital, Philadelphia. To this clinic practitioners may send their patients for a physical examination and special tests at a cost considerably less than a specialist's fee. The patients then return to their own physicians for treatment.

Surgeon General Tells President Nation's Health Is Good

President Hoover has been informed by Dr. Hugh S. Cumming, surgeon general of the Public Health Service, that despite the economic depression the nation has every reason to be thankful that in the matter of the most important wealth of the people—their health—the country has never been as prosperous in its history as last year.

In a letter made public at the White House recently Doctor Cumming told the President that this gratifying condition has been due, among other things, not only to the absence of unpreventable epidemic diseases, but largely to aroused public interest in the matter of health during the year.

In his letter, Doctor Cumming goes on to say:

"I am not unmindful of the apparent increase in sickness due to the largely increased call upon free dispensary and hospital services, but on the other hand reports which have reached me from physicians engaged in private practice all over the country indicate that the increase in attendance at free hospitals and dispensaries is in large measure offset by a decrease in the pay practice of private physicians."

Responses from state, city and local health officers to inquiries regarding health conditions generally confirm the impression given by the data which accompanied the letter that 1931 was a favorable year. While in certain local areas reports indicate an increase in malnutrition among children, the reports in general for 1931 show an improvement in this condition. Many more persons are asking for charity medical services and this gives the impression at first that there is an increase in sickness, but to counterbalance this there are many reports of decreases in paid medical practice. To meet this added burden upon free clinics and hospitals, there has been an increase in local contributions for such purposes.

New Nurses' Home Being Built at Children's Memorial, Chicago

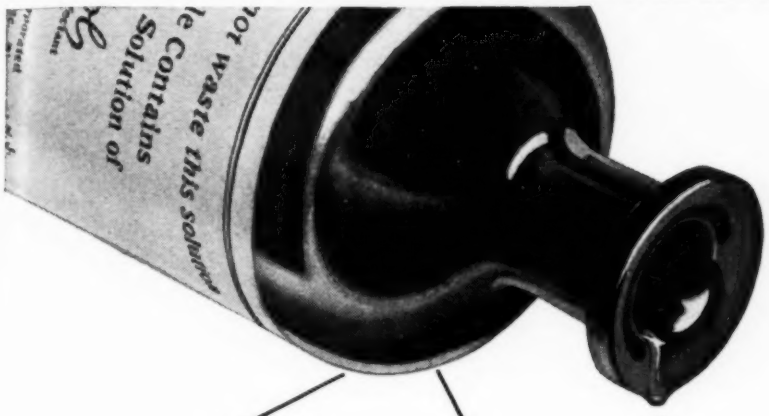
A new nurses' home is being built at the Children's Memorial Hospital, Chicago. The structure will cost $400,000.

It will be seven stories high, fronting 120 feet with a depth of 163 feet, and will contain, in addition to accommodations for nurses, both laboratory and recreational facilities. It will be of brick construction. The site of the new home is across the street from and to the east of the Children's Hospital.

Another Hospital Establishes Flat Rates for Maternity Patients

The Northern Duchess Health Service Center, Rhinebeck, N. Y., has put into effect special flat rates for maternity patients. Ward patients are charged $45 and semiprivate patients $55, based on a ten-day stay in the hospital. All patients who wish to avail themselves of these rates, according to the *Journal of the American Medical Association*, must present a certificate from their physician showing that they have had adequate prenatal care from at least the third month of pregnancy.

THE GREATEST DISINFECTANT NEWS IN 40 YEARS



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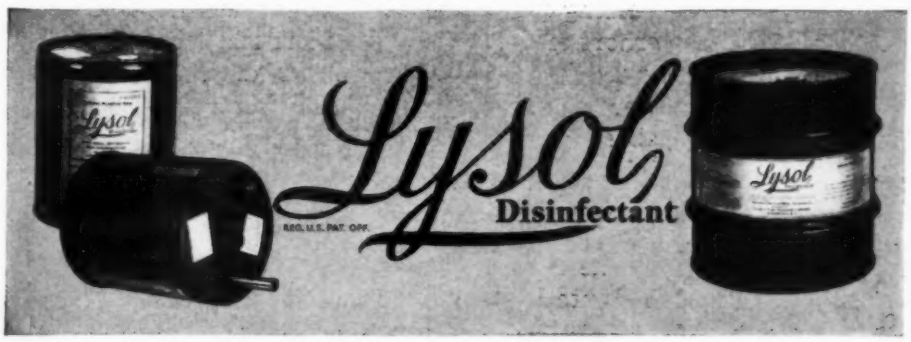
No longer need hospitals gamble with cheap, unsafe, and weak substitutes . . . No longer need the cost of reliable disinfection be a hospital problem . . . *For the special no-profit-price of "Lysol" to hospitals remains the same . . . $1.50 per gallon in lots of 10 gallons or more.*

Get your order in early for this new double-strength "Lysol". Hospitals will be served first . . . In fact, no commercial announcement of this radically new "Lysol" will be made until every hospital is supplied. For your convenience in ordering, use the coupon below.



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NEWS OF THE MONTH (Cont'd)

Florida Group Endorses Veterans' Hospitalization Plan

Dr. Walter A. Weed, superintendent, Morrell Memorial Hospital, Lakeland, Fla., was chosen president-elect of the Florida Hospital Association, the annual meeting of which was held in Jacksonville, February 2. This meeting was arranged in connection with the Southeastern Sectional Congress of the American College of Surgeons, and the same programs of hospital conferences were used by the two organizations.

Other officers chosen were: treasurer, Lee S. Lanpher, assistant superintendent, Duval County Hospital, Jacksonville; directors, Dr. L. L. Andrews, superintendent, Orlando-Florida Sanitarium and Hospital, Orlando; J. A. Bowman, superintendent, Monroe Memorial Hospital, Ocala; Dorothy B. Thurston, superintendent, Halifax District Hospital, Daytona Beach, Fred M. Walker, general superintendent, Duval County Hospital, was reelected executive secretary. J. H. Holcombe, superintendent, St. Luke's Hospital, Jacksonville, president of the association, presided at the sessions of the meeting.

The association endorsed a general plan, as currently advocated and promoted by the American Hospital Association, by which disabled veterans shall be hospitalized at Federal expense in civilian hospitals which may have offered their facilities upon acceptable terms. The endorsement will be framed in suitable resolution form and forwarded to the headquarters of the American Hospital Association and of the American Legion, and to Florida's representatives in the Congress of the United States.

Dr. Bert W. Caldwell, executive secretary, American Hospital Association, addressed the meeting, the theme of his address being the hospitalization of veterans in civilian hospitals.

New Radiology Institute Is Opened in St. Louis

Washington University School of Medicine, St. Louis, has greatly expanded its radiological service through the newly opened Edward Mallinckrodt Institute of Radiology. The institute, which was built at a cost of $1,220,000, will serve the school of medicine and the allied hospitals.

The second, third and fourth floors are reserved for cases diagnosed as general roentgenologic, surgical urologic and gastro-intestinal. The fifth floor will be devoted to treatment work, the sixth to research in the physics of radiation and the seventh to roentgen research on animals. The waiting rooms have been planned to eliminate confusion in separating hospital and dispensary cases and in dividing the patients by sex and race. A memorial room is planned on the main floor for Dr. Walter Mills who, as director of the department of radiology, planned the development of the institute. Doctor Mills died in 1924 as a result of overexposure to x-rays.

Funds for the institute were provided by the late Edward Mallinckrodt, Sr., and by Edward Mallinckrodt, Jr.

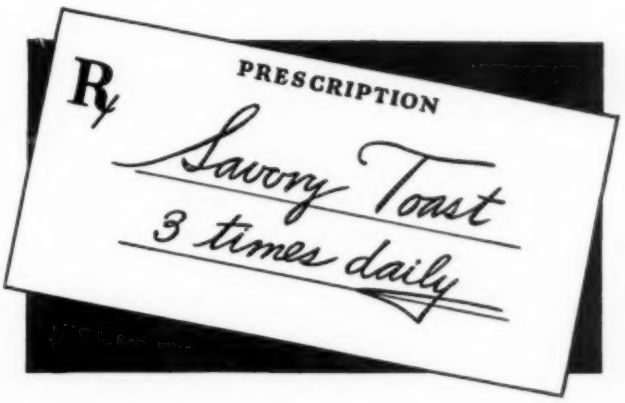
Canada Completes Its Survey of Nursing Education

The survey of nursing education in Canada, which was begun in 1927, is now completed and ready for distribution. The survey, for the greater part, was financed by the Canadian Nurses' Association in cooperation with the Canadian Medical Association. This action was taken in order to get at the facts of the nursing situation in Canada.

In 1927 the Canadian Nurses' Association and the Canadian Medical Association appointed three representatives each to form a national joint study committee. This committee was entrusted with the responsibility of devising ways and means for undertaking the survey. The committee decided that the survey must follow scientific methods and that it should be made by a specialist in education. G. M. Weir, professor of education, University of British Columbia, who, some years ago, conducted a survey of education for the government of British Columbia, was asked to make the survey of nursing education. Fortunately, the board of governors of the University of British Columbia, realizing the necessity and importance of this work, were good enough to give Professor Weir leave of absence for almost two years, in order to undertake it.

The completed report deals with many angles of nursing education and nursing practice.

The survey is published by the University of Toronto Press and is priced at $2.



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Savory toast is thoroughly cooked, evenly browned and soft-centered

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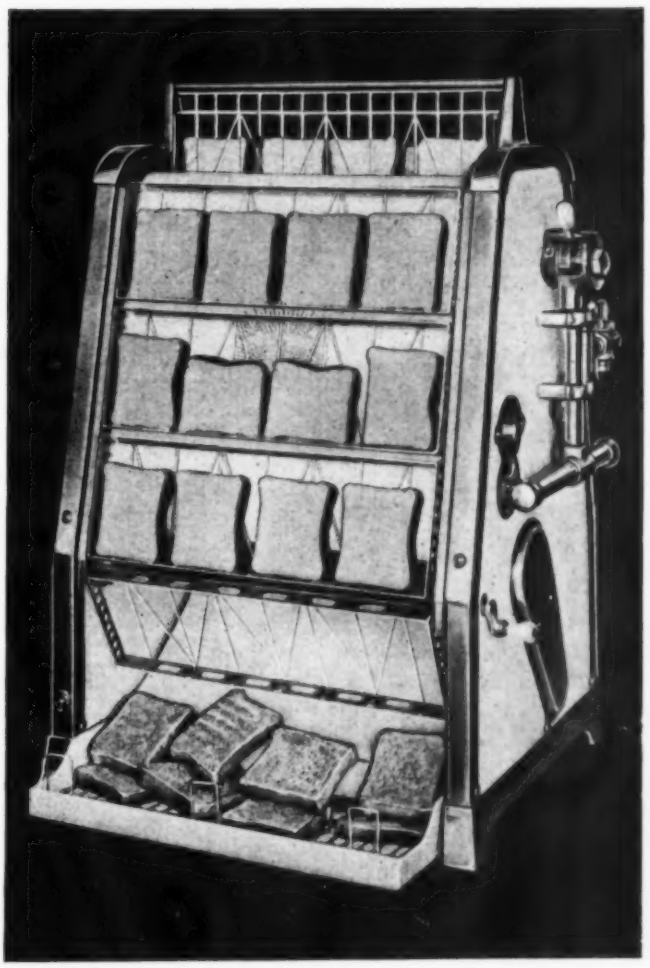

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PERSONALS

DR. HARVEY CUSHING is to retire as surgeon-in-chief, Peter Bent Brigham Hospital, Boston, on September 1. He will be succeeded by DR. ELLIOTT CARR CUTLER, director of surgery, Cleveland Lakeside Hospital.

ANNA ENGE has accepted the superintendency of the new Stevens County Hospital, Morris, Minn.

DOROTHY BRIGHT, who has been an assistant instructor at the University Hospital of Good Samaritan, Syracuse, N. Y., has accepted a position as assistant superintendent, Saratoga Hospital, Saratoga Springs, N. Y.

DR. BERTHOLD S. POLLAK, medical director, Hudson County Tuberculosis Hospital and Sanatorium, Secaucus, N. J., recently completed his twenty-fifth year in that position.

DR. EDLESTON H. COOKE, superintendent, Alberta Provincial Mental Hospital, Ponoka, Alberta, has resigned to engage in private practice. DR. CHARLES A. BARAGAR is now acting superintendent at the hospital.

ANNA L. PICK is the new superintendent, Delhi Hospital, Delhi, N. Y.

DR. CLARK B. HOLBROOK has been named superintendent, Farview State Hospital for the Criminal Insane, Farview, Pa. DOCTOR HOLBROOK has been acting superintendent of the hospital since the death of DR. WILLIAM LYNCH on March 29, 1931.

WILLIAM B. SAVAGE has been elected director of hospitalization, Haverhill, Mass. MR. SAVAGE is also superintendent of the city infirmary and purchasing agent of the municipal hospitals.

DR. CLAMOR H. MAGNA, superintendent, Kings County Hospital, Brooklyn, N. Y., died recently.

CHARLOTTE JANES GARRISON, until recently director, Hospital Library and Service Bureau, American Hospital Association, has been appointed superintendent, Newton Memorial Hospital, Newton, N. J. The Newton Memorial, a forty-four-bed hospital, is newly completed, and MISS GARRISON will have charge of furnishing and equipping the institution before it is opened to the public.

ELLEN E. KOSKELA, formerly with St. Luke's Hospital, Marquette, Mich., is now superintendent, Charlevoix Hospital, Charlevoix, Mich.

ELIZABETH PIERCE has resigned as superintendent, Children's Hospital and Research Institute, Cincinnati, after ten years of service. MISS PIERCE, who has completed the building program of the institute, plans to take a vacation for an indefinite period. She is well known throughout the hospital and nursing world, having written a book on pediatric nursing besides having performed several other pieces of research work not only in pediatric nursing but in pediatric hospitals.

BLANCHE PHILLIPS REAST has been appointed dietitian at Broad Street Hospital, New York City. MRS. REAST was formerly with the United States Naval Hospital, Brooklyn, and the Genesee Hospital, Rochester, N. Y.

CARRA LAMB has been appointed superintendent, Tupelo Hospital, Tupelo, Miss.

RUTH BEAN has been named superintendent, Biltmore Hospital, Asheville, N. C.

ANNYCE WALLACE has been named superintendent, Forth Worth-Tarrant County Tuberculosis Hospital, Fort Worth, Tex., succeeding MARY TUCKER, resigned.

MARGARET SPIERS has recently become superintendent of the Chippewa County War Memorial Hospital, Sault Ste. Marie, Mich.

WILLIAM E. CALLAHAN is now superintendent, Grace Hospital, Hutchinson, Kan.

DR. MYRON D. JACOBY has recently been appointed as medical superintendent, Riverlawn Sanatorium, Paterson, N. J.

MYRTLE HAUGEN, who has been night supervisor for the past two years at St. Olaf Hospital, Austin, Minn., is now superintendent of the hospital.

LOUISE MCNEILL has recently been appointed as superintendent of the Petaluma General Hospital, Petaluma, Calif.

REV. C. J. ANDREWS, superintendent, Swedish Covenant Hospital, Chicago, for the last ten years, died of acute appendicitis on February 17.

SAMUEL G. ASCHER has resigned as executive director of the Jewish Hospital of Brooklyn, Brooklyn, N. Y.

Here's a **HOT** *cereal with a laxative action all its own*

THE nourishing properties of whole wheat cereals have long been recognized. But when a delicious, hot cereal combines the advantages of whole wheat with a safe, gentle laxative action, that's real news. And that is exactly what Heinz Breakfast Wheat does.

For this tempting, satisfying hot cereal embodies an exclusive Heinz feature—*added* corrective cellulose.

In Heinz Breakfast Wheat (as in Heinz Rice Flakes, too) this added corrective cellulose, with its high capacity for absorbing moisture, expands several times in size. It forms a soft, mealy bulk that is stimulating without being irritant. Its mild, natural effect can best be compared to that of the cellulose in celery, spinach and other vegetables.

Only Heinz combines Corrective Cellulose with a Cereal

The H. J. Heinz Company experimented for eight years, in collaboration with the Mellon Institute, to perfect the process that gives Heinz cereals their additional corrective cellulose content. No other manufacturer can use this process. No other cereals contain added corrective cellulose. And its effectiveness in combating constipation has been demonstrated in a series of carefully supervised institutional tests.

We believe Heinz Breakfast Wheat affords a helpful treatment for patients —and one which they will find pleasant to follow.

Best results are obtained through serving Heinz Breakfast Wheat for breakfast, followed by Heinz Rice Flakes as dessert at luncheon or dinner. After a week or so, one or the other as a regular morning cereal will sustain the good results.

Our representative has more information to give you concerning the corrective cellulose content in Heinz cereals. He will also arrange for you to make a thorough trial of Heinz Breakfast Wheat at no cost to you. Mail the coupon. He'll call at your convenience.

HEINZ *Breakfast* WHEAT

• "ONE OF THE *57* VARIETIES" •

THE ONLY HOT CEREAL THAT CONTAINS ADDED CORRECTIVE CELLULOSE

H. J. Heinz Company, Dept. MH-3, Pittsburgh, Pa.
Please have your salesman call, in regard to Heinz Breakfast Wheat.

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H. J. HEINZ COMPANY — MAKERS OF THE "57 VARIETIES"

NEWS OF THE MONTH (Cont'd)

DR. ROBERT H. MOORE is the new superintendent of the Hospital for the Dangerous Insane, Lansing, Kan. He was formerly associated with the Kansas City General Hospital, Kansas City, Mo.

DR. JAMES BIRD CUTTER, formerly medical director, Children's Hospital, San Francisco, is the newly elected head of the Pacific Colony, the state hospital at Spadra, Calif. DR. JAMES W. HAGGERTY, of the Stockton State Hospital, Stockton, Calif., has been named as assistant to DOCTOR CUTTER.

ALMENA E. WUERTHNER is the new superintendent of the Presbyterian Hospital, San Juan, Porto Rico. MISS WUERTHNER was formerly connected with the Philadelphia General Hospital, Philadelphia.

LYDIA M. HAASE, formerly superintendent, Southside Community Hospital, Farmville, Va., is now serving the Community Hospital, Glasgow, Ky., as superintendent.

E. T. FRANKLIN, former president of Union College, Barbourville, Ky., is the newly elected superintendent, Ft. Wayne Methodist Hospital, Ft. Wayne, Ind., succeeding CLARA SANKS who has been forced by illness to give up her executive work.

Portrait of Adelaide Nutting Is Gift to Teachers College

A portrait of Adelaide Nutting, pioneer in nursing education, and from 1906 to 1925 a distinguished member of the faculty of Teachers College, Columbia University, was presented to the college on February 10 by a group of Miss Nutting's colleagues and friends. The portrait is the work of the eminent young Polish artist, Stanislav Rembski.

The short presentation ceremony was conducted by David Eugene Smith, chairman of the portrait committee, with brief remarks by Dean William F. Russell, President Nicholas Murray Butler and Cleveland E. Dodge, president, board of trustees. In the audience were many members of the college faculty and student group, alumnae of the nursing education and friends and co-workers of Miss Nutting. Miss Nutting herself could not be present because of a severe cold.

President Butler, in a graceful speech, characterized Miss Nutting's work as follows: "It was Miss Nutting's function to make a new integration of material lying about in scattered units. She brought together something from each of the fields of natural science, medicine, social service and education, and bound them all together with that real human insight and deep and charming feeling which characterized her and gave her unique prestige on Morningside Heights."

When Miss Nutting retired from Teachers College, she was honored with the title of professor emeritus.

Mrs. Kellogg Fairbank Resigns From Board of Chicago Lying-In

With the Chicago Lying-In Hospital, Chicago, well established in its new buildings, Mrs. Kellogg Fairbank, chairman of the hospital's board of directors, has resigned to devote herself to her literary, political and social activities. Mrs. Ernst Freund, who has been active in the affairs of the hospital for many years, succeeds Mrs. Fairbank.

Chicago Hourly Nursing Service Has School for Mothers

Classes in prenatal and baby hygiene are being held at the Chicago Lying-In Hospital, University of Chicago, for expectant mothers. Miriam Ames, executive director, Hourly Nursing Service, is conducting the classes.

The nursing service hopes, through the classes, to help the mother to obtain the minimum of mental and physical discomfort and the maximum fitness for the birth of her child.

New State Home for California Veterans to Be Built

Ground was broken on January 21, by Gov. James Rolph, Jr., of California, as the commencement of construction of the State Home for California veterans, to be erected at Yountville. A modern, fireproof hospital, to be built on the unit plan at a cost of $700,000, will replace wooden buildings that have been condemned by the state as unsafe for the tenancy of aged and disabled veterans who are patients and inmates.

Tempting them at Tray Time

ONE of the simplest ways to cheer up petulant patients is to serve desserts of interesting variety. And that, of course, immediately suggests Jell-O.

Jell-O is made in six pure fruit flavors —can be combined with either fresh or canned fruits—enriched with cream, whipped cream, or ice cream—molded in all sorts of dainty designs to tempt finical appetites.

Unlimited in colorful sparkling variety, Jell-O surprises bring a welcome change from the usual dishes and make tray time something to be remembered pleasantly!

Send today for an assortment of tested quantity recipes for new Jell-O desserts, salads, and variations, all easy and economical to serve. Just use the coupon, checking what you want.

FOR DIABETICS

You can safely let diabetics enjoy the pleasing variety of Jell-O by serving them D-Zerta, widely recommended by the medical profession for patients limited in their carbohydrate intake. The only difference between the two products is that D-Zerta is sweetened with saccharine instead of sugar.

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FOOD SERVICE AND EQUIPMENT

A Series by KATHERINE MITCHELL THOMA, Dietitian, AND HERMAN SMITH, M.D., Superintendent, Michael Reese Hospital, Chicago

Catering to the Dietary Needs of Private Patients

IN THIS article we shall discuss the serving of food to private patients. The food service to private patients is primarily as much the administrator's responsibility as it is the dietitian's. Here, more than anywhere else, the hospital's policy regarding the type of food and the service it desires to give to its various types of private patients will largely if not completely dominate the picture. The dietitian in this situation is usually the instrument and, of course, an important instrument in carrying out this policy.

In any discussion of the specific problems of private ward *versus* private room service, the factors that influence the hospital's policy must be considered. The character of the community and the rate charged for the individual accommodation will determine to a large degree the type of service to be given. In smaller and in industrial cities where the whole community is more or less on the same economic or social level, the hospital policy may require the same type of food service to all its private patients whether they are in two, three or four-bed rooms or in single rooms. In other communities where social and economic levels are more sharply differentiated, the type of service may vary with the size of the individual private ward, and usually will vary between the private wards and the private rooms. We shall not attempt here to recommend various types of service but merely to point out that the type of service is primarily the responsibility of the administrator and of the hospital board.

Why Rules Should Be Flexible

At this point should be emphasized one of the aspects of private room service which in the past has caused considerable but avoidable difficulties. This is the policy of having rigid, unbending rules regarding food service, particularly the types of food, and charging for every minor or major deviation from these rules. It is, of course, understood that certain definite policies regarding food service should be outlined for different types of accommodations. We believe, however, that variations should be possible for any patient at any time.

Dissipating the Old Traditions

Hospitals frequently have been in difficulty with set menus for certain types of accommodations, giving patients no choice of foods other than those on the menu or, if any choices were allowed, charging extra for these changes. Both of these policies are wrong, we believe. While set menus are, of course, a necessity, if an accurate account of the actual cost of the changes and additions that individual patients desire is kept, a surprisingly small increase in the total cost over the accounting period will be revealed. This, of course, is predicated upon the fact that the original menu permits certain reasonable choices.

The difference in cost between a rigid menu and one with reasonable choices will likewise usually be found to be negligible over a period of time.

Insofar as is possible, in the food department as well as in all other departments, service to the patient should be paramount, and everyone in the hospital should determine to say "no" to the patient as few times as is possible. If this viewpoint of service is instilled into the hospital personnel, most hospitals will not only be happier places for their patients but also happier places for their personnel.

All of us now agree that old traditions regarding the feeding of hospital patients have in a large measure been dissipated. Most patients in hospitals are not critically ill with serious gastro-intestinal disorders and most of them can eat the things

Quantity Production brings down the Cost of this New GORHAM HOSPITAL LINE

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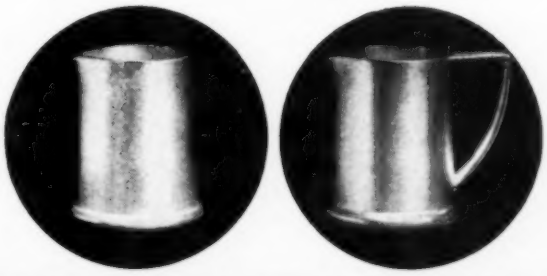

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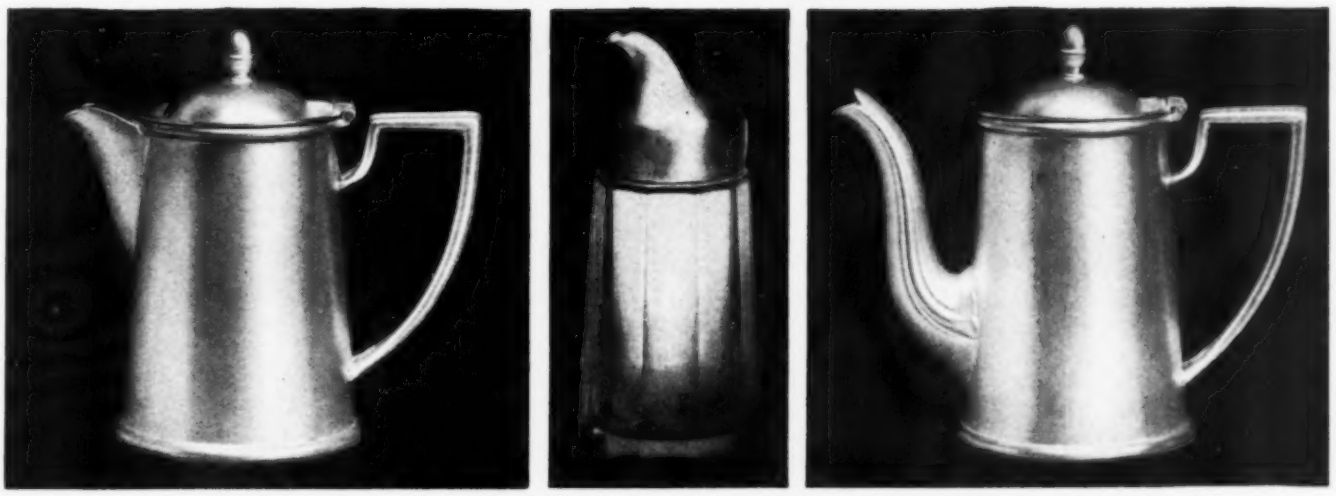

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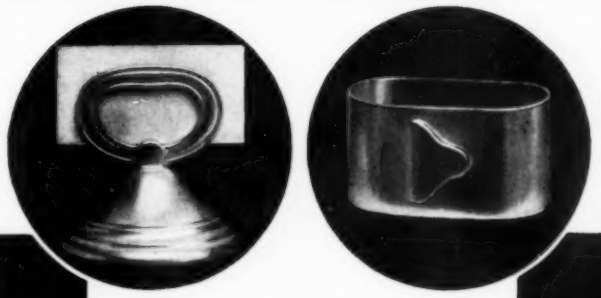

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THIS new hospital service is economical in price, simple in line, sturdy in construction. Its low price is the result of quantity production — it is made in accordance with Gorham standards and specifications . . . nickel silver base (not under 18 per cent), heavily silver plated.

No soft metal or soft solder is used in the construction of Gorham hospital ware.

The handles on the coffee pots are new-style construction, durable, strong, *properly insulated.* Send for samples and price list.

* Made in 1½, 2, 3 and 4 oz. sizes.
** Made in 2 and 6 oz. sizes. With or without cover.

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to which they have been normally accustomed in their homes. This covers the entire range of food on any hotel or restaurant menu. In the past, most of us have been motivated by two major ideas regarding food: first, that there was a marked difference between diet in health and diet in disease and that everyone in a hospital for any purpose came under the category of diet in disease; second, that everyone outside of hospitals ate foods that were too rich or "too something" for them. On this premise, all patients had to be given the approved diet that was usually made up of bland and therefore unappetizing foods. Our present thought is that such a diet is suitable only for patients with definite gastro-intestinal disturbances.

How Types of Service Vary

With this as an introduction, we can now discuss specific questions of service to private patients. Under the category of private patients we consider as different possibilities (1) those hospitals in which there is no difference between the private ward and private room food and (2) those hospitals in which there is a difference between private ward and private room food. In these hospitals, private wards are usually divided into two groups—the larger private wards and two-bed rooms and the cheaper single rooms in hospitals which have both expensive and inexpensive single rooms.

The menus for the patients in the larger private wards are usually based on the rate charged for the accommodation and the amount the hospital feels it can expend for both raw food and for the servicing of this food insofar as the tray itself is concerned. We say the tray, because there is practically no difference in the food preparation in the kitchen.

There are three main types of food service insofar as menus are concerned: (1) the type where patients are not shown any menus at all; (2) the type where a menu is prepared without any choice and the patient is merely informed what foods will be served; (3) the type where the menu has available a number of choices for the patient.

Consulting the Patient's Tastes

We are convinced that the third method is not only the most desirable but is in reality little if any more expensive than the other methods. The differences in satisfaction, assuming that the tray service and preparation are the same, are immeasurable.

If sufficient dietetic help is available, the menus should be presented by someone in the dietetic department and the choice from the menus discussed by this person with the patient. If sufficient help is not available, this discussion can take place between the patient and some of the nursing personnel.

Tabulations of these choices will result in more accurate buying, preparation and distribution and will frequently offset the more or less haphazard buying methods that are required by a choiceless menu.

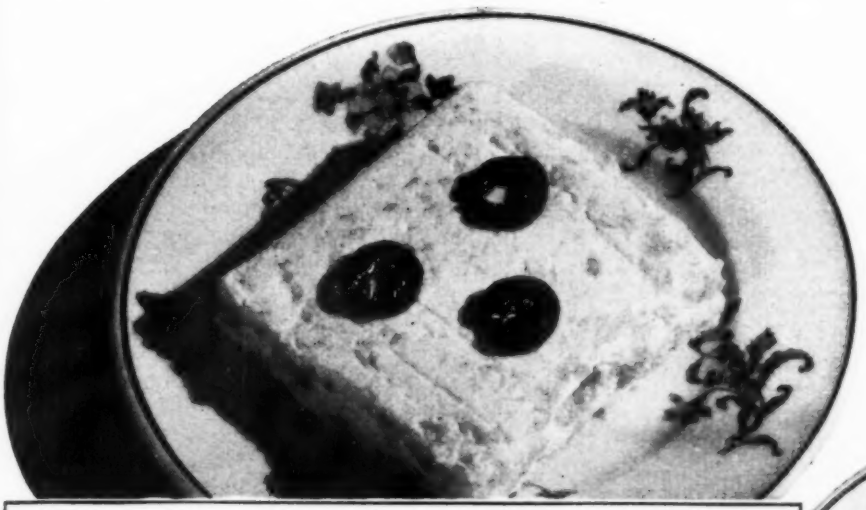
The basic principles underlying the discussion of private ward food will be largely applicable to hospitals that do not differentiate between inexpensive and expensive private rooms. In every type of private room service, menu choices should be offered and these choices should be checked with the patient every day.

In those hospitals that do differentiate between inexpensive and expensive private rooms, while we have the same general principles governing the situation, we have a number of modifications that are of considerable importance. Patients in this type of hospital are usually paying in full for their maintenance, and for them it is not a question of policy as to whether they should receive all the service they want, but merely a matter of equity. For these patients it seems a necessity to have both choice of menu and consultation with the patient. The choice for these patients should be as liberal as possible and, in addition to the menu choice, these patients should be allowed to obtain food not on the menu. While this may appear extravagant, some experience with the program will usually show that the cost of the additional items ordered will, over a period of time, not amount to very much in the total cost.

Why Requests Should Be Granted

Most patients are satisfied with a fairly liberal menu and only occasionally want additional things. If these occasional demands can be met they will usually be found to be inexpensive but of inestimable value to the patient. If these requests are denied or are the subject of an additional charge, the reactions are not usually good. In line with hospital policy in all other departments, as few nuisance charges as possible should exist, and charging for extra food items for full pay patients is unquestionably a nuisance charge. Even in these times when the utmost need for economy exists one must not lose track of the fact that a hospital's greatest asset is a satisfied community.

Some of the hospitals in the country which have their more expensive private rooms in separate private pavilions lay special emphasis on the details of food service. They have provided service to the patients' rooms for guest trays for any meal, afternoon tea for both patients and their guests and evening lunches for either patients or guests.



For Full and High-Caloric Diets

Pineapple Bavarian Cream. **Dissolve soaked gelatin in hot juice, drained from Libby's Crushed Pineapple. Chill until slightly thick, and mix well with sweetened whipped cream. Fold in Libby's Crushed Pineapple. Chill until set. Serve sliced, and garnished with sliced maraschino cherries.**

For the General Diet

Pineapple Rice Pudding. **Heat and thicken juice from Libby's Crushed Pineapple with a little cornstarch. Add Crushed Pineapple and pour over mound of hot steamed rice. Top with dash of cinnamon before serving.**

THE KIND OF DISHES your patients would choose

. . . and the kind you can serve economically

EVEN though they can't tell proteins from calories, patients do have a lot of notions about what hospital food should be. To them, the difference between good food and poor isn't a problem in dietetics. It's a matter of looks, color, flavor—the standards they go by at home.

So we are suggesting these new pineapple dishes. Attractive, flavorful dishes—the kind that patients themselves would choose, and that you can serve at a moderate portion cost.

For they're made with two styles of Libby's Hawaiian Pineapple, Crushed and Sliced. Richer in flavor, finer in color and texture, Libby's Crushed Pineapple comes from the same superb, sun-ripened fruit as Libby's *center slice* Pineapple.

Because it is scrupulously selected and canned by experts within a few hours after picking, Libby's Crushed Pineapple never varies in its matchless quality or full-measure pack.

Just try it in your hospital. Count on your pineapple dishes having the true, natural pineapple flavor. You'll find, too, you can rely on serving them at a definite, unvarying cost.

Order Libby's Crushed Pineapple from your usual source, without delay. Keep it on hand for frequent use. And bear in mind that Libby also packs Sliced Pineapple (which gives you *just the center slices*), Diced Pineapple, and Tidbits.

Libby, McNeill & Libby
Dept. N-35, Welfare Bldg., Chicago

For the Staff, and General Diets

Luncheon Plate. **Arrange crisp lettuce on plate, with two slices of Libby's Pineapple topped by mounds of cottage cheese. Garnish with currant jelly, and whole-wheat bread and butter sandwiches. Serve with French dressing.**

Libby's 100 Foods

These Libby Foods of finest flavor are now packed in regular and special sizes for institutions:

Red Raspberries	Tomato Juice	Salmon
Tomato Purée	Olives, Pickles	Evaporated Milk
Corn, Beets	Mustard	Mince Meat
Hawaiian Pineapple	Bouillon Cubes	Boneless Chicken
California Fruits	Beef Extract	Stringless Beans
Spinach, Kraut	Peas	Santa Clara Prunes in Syrup
Jams, Jellies	Catchup	Strawberries
Pork and Beans	Chili Sauce	

Loganberries California Asparagus

Hospitals, although primarily places for the care of the sick, will in no way interfere with the patient's recovery if they cater to his individual wants and desires.

We now come to the question of actual tray service to the different accommodations. Much that was said in regard to menus is equally applicable to the service of trays. We shall therefore not attempt to differentiate completely between the tray service to the private ward and that to the private room, but shall discuss them together, merely pointing out as we go along the possibilities of differentiation.

The choice of tray equipment depends upon the budget allowance, but it should be as attractive as possible. Here, as in other departments of the hospital, considerable practical help can be obtained from interested committees of women's boards.

The dietitian should be responsible for the service of the trays to the patient and it should be her responsibility to see that the person carrying the tray to the patient is neatly clad. Although this is a minor detail, it is important to the patient.

In private ward service the complete tray from soup to coffee is usually served at one time because sufficient help is not available to serve it in courses. For better private room service, the courses are to be preferred. Some organizations serve a course of soup, one of the meat and vegetables and a third of the dessert and beverage.

As many plate covers and covered dishes as the budget will allow should be utilized. Not only must the initial cost be considered, but also breakage, upkeep and cleaning. Speedy service and special utensils should be utilized to keep the hot foods hot and the cold foods cold.

The policy behind the food service is of as great importance as the technique involved. This policy should be developed by governing boards and hospital workers in order to give the community the type of service it wants and wishes to pay for.

What Is Expected of the Hospital Housekeeper

That hospital housekeepers and hotel housekeepers have much in common, was expressed by Dr. J. J. Golub, superintendent, Hospital for Joint Diseases, New York City, at the recent meeting of the New York chapter, National Executive Housekeepers Association. The fundamentals of housekeeping are exactly the same, broadly speaking, in hospitals as they are in hotels. The main difference lies in the fact that hospitals deal with the horizontal individual and hotels deal with a vertical individual.

The patient who is the hospital's guest is confined to his bed twenty-four hours of the day, Doctor Golub pointed out. Therefore, hospital sheets have three days' wear in one day as compared with hotel sheets which are used only eight hours of the day or thereabouts.

Doctor Golub continued: "The hospital housekeeper has to become acquainted with equipment of various kinds and their uses. She has to know what is happening in the operating room. She has certain problems in connection with the x-ray department and the laboratory.

"There was a time when housekeeping in hospitals was regarded as merely a job that needed an intelligent maid to handle it. But superintendents have learned and have paid a high price for an intelligent housekeeper far above the type of an excellent maid. As a result of her activities, hospitals are as clean as hotels have been for the last twenty or thirty years. Superintendents have come to realize that the housekeeper must know something more than how to supervise the work of a maid or a porter. She must have a scientific knowledge of materials, must know weights and measurements and be able to test linen.

"When the housekeeper is asked for an opinion about a certain product, a scientific answer regarding the purchase of this and any other materials for her department is expected. The head of the housekeeping department in the hospital field is an executive fully as much as any professional group that makes up the complex arrangement of the hospital's staff."

Riding to the Hospital With Mickey Mouse

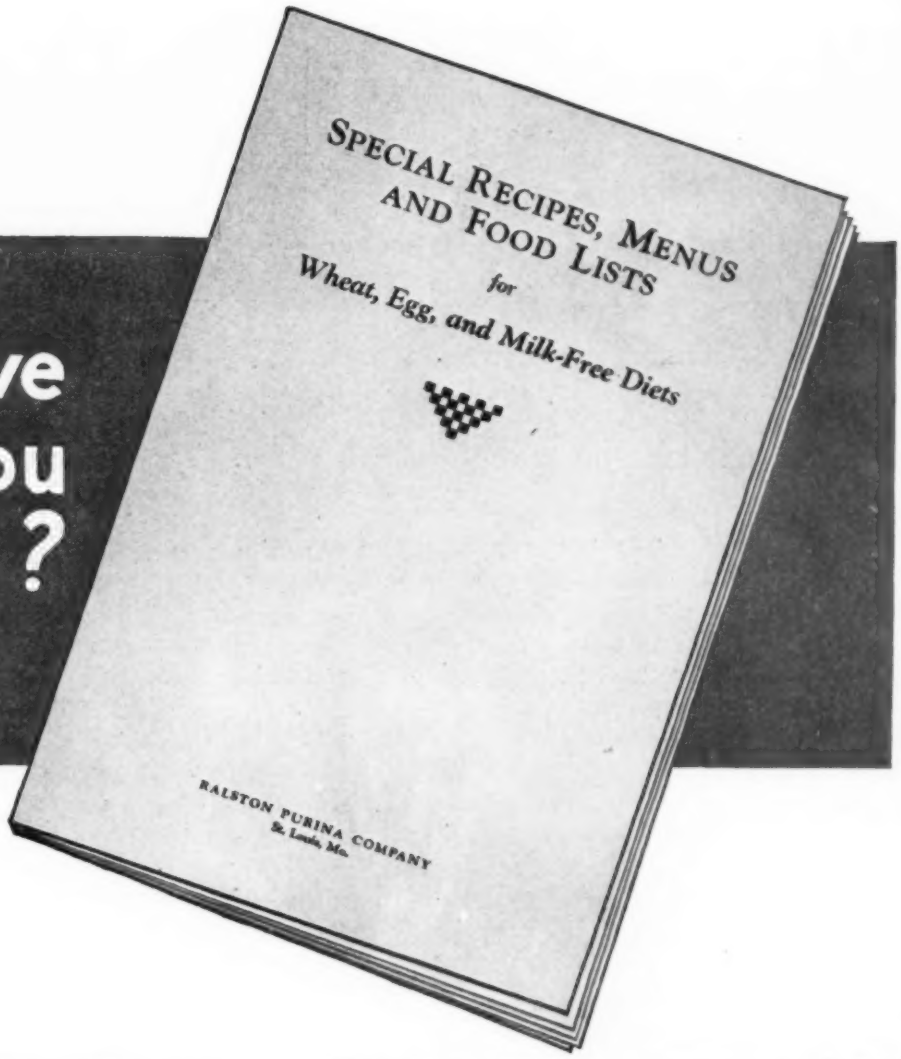
Something new—and colorful—in ambulances is being tried with marked success by the Royal Manchester Children's Hospital, Manchester, England.

The ambulance, once drab and dark colored, has been painted in striking colors with all the animal characters of which the children are so fond.

"This is the first time that anything of the sort has ever been tried in this country," says an official of the hospital, "and we feel sure it will have the psychological effect of making the ambulance more attractive and congenial to the children who are unfortunate enough to have to be taken to the hospital in it."

The ambulance has been painted in a blue and white scheme, and the characters shown in the bright blue are Pip, Squeak, Wilfred, Felix the Cat and Mickey Mouse.

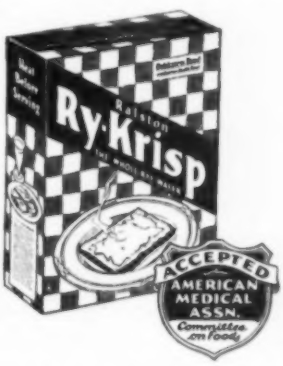
May we send you a copy?



To assist patients allergic to wheat, eggs, or milk, or a combination of these three — this booklet has been planned by a reputable dietitian, with the co-operation of physicians interested in allergy. Every effort has been directed toward presenting the information simply and concisely, so that the booklet will be practical for the patient's own use.

Separate sections are allotted to wheat, eggs, and milk. In each section, the foods which must be avoided and the foods which are permitted are listed. The Combination Section, for patients allergic to wheat, milk, and eggs, includes a list of foods which are permitted, and two sets of sample menus for three days — one set for adults, one for children. In a fifth section, specially prepared, tested and approved recipes are given for the dishes suggested in these menus.

We will gladly send you a copy of this booklet, and a sample package of Ry-Krisp Whole Rye Wafers for testing. If you find this booklet practical for distribution among your patients, we will gladly send you as many copies as you wish. Just fill out the coupon, and mail it to us.



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Without obligation, please send me your new Allergy Recipe Booklet, and a sample of Ry-Krisp for testing.

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HOSPITAL EQUIPMENT AND OPERATION

Conducted by C. W. MUNGER, M.D.
Director, Grasslands Hospital, Valhalla, N. Y.

Choosing Lighting Equipment

THOSE who buy lighting fixtures for the modern hospital should not feel that the equipment is merely something to hold a lamp bulb. It is much more than this, and there are many factors to be considered before the equipment is purchased.

The private and ward rooms are probably the most important part of the hospital. It is in these rooms that indirect lighting or lighting with the light source concealed should be used. Indirect fixtures that have either high or low intensity by being wired in two circuits are on the market. With this type of lighting the patient is always protected from uncomfortable glare, and at the same time the finest shadowless illumination possible is produced for the doctor and nurse in their work with the patient. Indirect portable lamps having a reflector that directs the light to the ceiling and that is concealed by an ornamental shade are also used. This type of unit is practical and efficient. It gives the sick room a homelike atmosphere which contributes to the comfort of the patient.

Operating rooms should always be given individual study. Some are better suited for indirect lighting, while others should have high intensity direct lighting properly engineered.

Enclosing Bowls Should Be Carefully Chosen

When direct lighting of the enclosed glass bowl type is to be used consideration should be given to the diffusing and efficiency qualities of the glass, the gauge of the metal supporting the glass, the finish on the metal parts and whether or not the glass is of the proper size to enclose the correct wattage lamps for the location in which it is to be used. Enclosing glass without the proper diffusing and distribution qualities is not much better than having an exposed lamp source. The density and shape of the glass regulate these two qualities and care should be exercised in selection. Cased glass of one or more casings is used for the better type of enclosing glass luminaires. The shape should be governed by the distribution curve that best fits the location in which the unit is to be used.

Aid From an Expert

In the selection of fixtures for the hospital it is advisable to obtain the services of a reputable lighting engineer who will cooperate with the architect or with the owner. The manufacturer or central station lighting engineer will give this service without obligation. His recommendations will be based on extensive experience and will be compiled from much data that he has available. If there are any doubts about the light that the recommended fixtures will produce, the engineer with a foot candle meter or photometer can take actual readings with them to prove or disprove the correctness of his choice.

In lobbies, waiting rooms, parlors and all other more or less public spaces luminaires of special design are generally selected so as to harmonize with the architectural treatment. Here again the lighting specialist can be of valuable assistance. He is able to determine from the suggestions given him by both the owner and the architect the type of unit that should be used. Sometimes an ornamental chandelier with candle lights is desired and is considered suitable, and for other places a shallow luminous bowl indirect unit of ornate design is chosen. Reliable manufacturers of lighting fixtures have hundreds of designs that are applicable to almost any location. If they do not have just the design wanted the ingenuity of their designers is called into action.

One of the most important features in erecting new buildings or in rewiring old ones is to insist on the use of wires of adequate capacity and sufficient circuits to carry at least 50 per cent more than the current originally required. Changing

COFFEE

without caffeine

as a diet supplement

IT IS often difficult to reconcile patients to the diets prescribed for them. But there is one thing you can do which will make the task easier — that is to allow coffee — not ordinary coffee but Kellogg's Kaffee Hag Coffee — "real coffee that lets you sleep."

Most patients expect coffee to be forbidden. So that being allowed to enjoy their favorite drink is always a pleasant surprise and compensates in a large measure for the loss of other foods. Yet it is harmless because Kaffee Hag Coffee will not cause sleeplessness or affect the nerves or digestion. The effect of the drug caffeine is removed by a special process.

It is guaranteed pure coffee . . . 97% free of the drug caffeine. In addition, the indigestible wax is removed.

Won't you try this delicious coffee? We want every physician to taste the new improved blend — which experts cannot tell from the other fine coffees sold today.

Write to Kellogg Company, Battle Creek, Michigan, for a free professional sample.

• • •

KELLOGG COMPANY, Dept. R-3, Battle Creek, Michigan

Please send me, free, a ½-pound can of Kaffee Hag Coffee. (*Offer good in U. S. A. only.*)

Name _____

Address _____

ACCEPTED AMERICAN MEDICAL ASSN. Committee on Foods

Kaffee Hag Coffee is accepted by the American Medical Association. It is often recommended by physicians.

the wiring after the contract has been let or after the job is completed is much more costly than if adequate wiring was originally provided. Fortunately architects and engineers are finding that money spent in the beginning for adequate wiring is well spent and are recommending and insisting that it be done.

In the location in which indirect lighting is to be used the main factors to consider are efficiency, ample wattage capacity, maintenance, ceiling decoration and height and the materials used in the manufacture of the equipment.

Type of Reflector Is Important

The efficiency of indirect lighting luminaires depends largely on the design and the type of the reflector used in the interior. Silver mirrored glass reflectors are accepted as the most efficient type if the luminaire has been properly designed for their requirements. No other commercially practical reflector has the efficiency of that of silver mirrored glass, which has a 93 per cent reflecting factor. Porcelain enamel reflectors come second, with 74 per cent. When the silver mirrored glass reflector is used it should be so designed that maximum ceiling distribution is obtained without the presence of shadows and highlights.

Wattage capacity at the outlet where indirect lighting is to be used is also important. The amount necessary depends on the location and type of work to be done.

Fixtures Should Be Easy to Clean

The maintenance of both the inside and the outside of indirect lighting luminaires should be simple as it is necessary, in order to obtain maximum efficiency, to employ a regular program of cleaning. When silver mirrored glass reflectors are used a damp cloth wiped over the inside surface of the reflector restores it to its original efficiency. The exterior in many types of luminaires may be washed with soap and water and therefore kept clean at all times and at a low maintenance cost.

The ceiling decoration should always be light, preferably with a matte finish. The ceiling height governs the suspension of the unit in order to obtain correct light coverage on the ceiling.

In buying lighting equipment the hospital should be sure that it is of good quality and manufactured by a responsible firm that can and will stand back of lighting layouts that they recommend and material that they sell. Costly errors have been made in many hospitals due to inaccuracy. Faulty vision and unnecessary fatigue are, it is a well known fact, often directly traceable to poor and inadequate lighting conditions for workers.

Laundry Wrappers for Uniforms and Other Clothing

By MARY W. NORTHROP

Chief Dietitian and Housekeeper, Harborview Hospital, Seattle, Wash.

A convenient wrapper for uniforms and other clothing to be sent to the hospital laundry in individual bundles is a hemmed piece of durable cloth a yard square. The clothing is put into the wrapper, and the diagonally opposite corners are tied together, making a bundle.

The laundry prefers this wrapper to a laundry bag because it has no strings to tangle or pull out, it requires no shaking out to empty, and it is easily washed and run through the flat work ironer. It can then be used as a wrapper for the return of the clean linen.

The manufacturers of colored uniforms have many ends of material for which they are glad to find an outlet. It is often possible for an arrangement to be made with such a concern to supply the squares, hemmed across the ends and with the name of the owner embroidered by machine across the center, at a nominal charge. Unless preshrunk material is used, allowance should be made for shrinking.

The neatness of this uniform method of wrapping improves the appearance of the laundry pile. If various colors are used, each individual picks out her own laundry easily on its return. For the convenience of the nurses, it is suggested that orders for the squares be given, with the money to pay for them, to the housekeeper in the nurses' residence, and that she place the orders with the supply house, who will then deal with only one person instead of many.

New Back Rest for Use on Ambulance Stretchers

By LOUIS GOLDBLATT, M.D.

New York, N. Y.

In the course of my experience as ambulance surgeon at the Beekman Street Hospital, New York City, I was often confronted with the problem of transporting orthopneic patients safely to the hospital. Present standard ambulance equipment does not provide satisfactory means of keeping helpless individuals in the sitting posture. It is necessary to have the patient lean against the ambulance surgeon, who at the same time supports him by placing an arm around the patient. Failure to observe these precautions may prove fatal to the patient.

With this in mind I have devised a simple and

A GOOD MAN—BUT

Well, you just can't seem to work up much confidence in him. It's his appearance, shaggy, slip shod. It is the same with hospitals. Make your institution look as good as it **is.** Don't add the extra burden of careless appearance to your real problems.

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compact back rest which can easily be attached to the standard stretcher in use on all ambulances. This back rest has proved practical in actual use at Beekman Street Hospital.

The canvas is made in the form of a sleeve which fits over the standard stretcher. At the head end, the upper portion of the sleeve terminates in another sleeve which is made to fit over the back rest. To this back rest sleeve is attached a buckle belt which holds the patient in place. The lower portion

The patient rests securely when the stretcher is tipped.

of the head end of the stretcher sleeve terminates in a short single layer of canvas to which is sewed a buckle belt which keeps the back rest in place on the standard stretcher.

The back rest consists of a firm frame made of metal or wood and is 29 inches long by 14 inches wide by ¾ inch thick. At its lower quarter the frame has been cut through and then rejoined by means of one-way hinges which open to an angle of 90°.

Advantages of the New Back Rest

The outstanding features of the new back rest are:

1. It keeps the patient in a comfortable sitting position continuously and without difficulty from the home bedside to the hospital bedside.

2. It is as secure as the standard type "lying down" stretcher. This new stretcher may be tipped sidewise at an angle of 45° without dislodging the patient. It may also be tipped in any other direction without any ill effect.

3. It is sanitary because it can be washed and sterilized after each use.

4. It weighs only 3½ pounds and can be folded away under the ambulance bed in a space 21 by 14 by 2 inches where it is accessible immediately when the need arises.

I am indebted to Mabel Davies, superintendent, Beekman Street Hospital, for her kindness in placing the facilities of the hospital at my disposal for the successful completion and use of this new stretcher.

NOW

Beautiful New Designs *Plus* A PATENTED FINISH GUARANTEED for 10 YEARS!

The private room shown at the right is furnished with pieces from our new line of authentic Early American reproductions. Note the home-like, restful atmosphere achieved, and in particular, the solid construction of the bed end made possible by our new side-crank bed spring.

Use This Remarkable Finish on Your Present Equipment

The remarkable properties of the new Stickley finish provide an almost endless number of advantageous uses for it in the modern hospital. Used on wooden floors, doors, trim, etc., it eliminates warping, checking, rot, fungi, termite, and bacteria. It seals the pores of cement and terrazzo floors, adds a beautiful lustre and makes them more easily cleanable and sanitary. It brings new life to the finish on old furniture, protects wall finishes and makes them washable. Easily applied with a cloth, brush or spray gun. Furnished in any quantity desired.

THE range of selectivity in Stickley furniture has been enhanced with beautiful new designs—with construction details carried out in Stickley's characteristic manner of building into its product unmatched durability, supreme comfort, convenience and sanitation.

And now all Stickley furniture has a startlingly superior, patented finish that will save the average hospital hundreds of dollars ordinarily spent for refinishing. It is absolutely impervious to alcohol, iodine, medicines, etc.—will not chip, check or craze. The most enduring finish known to science—guaranteed for 10 years.

By all means investigate this outstanding line before investing in furnishings.

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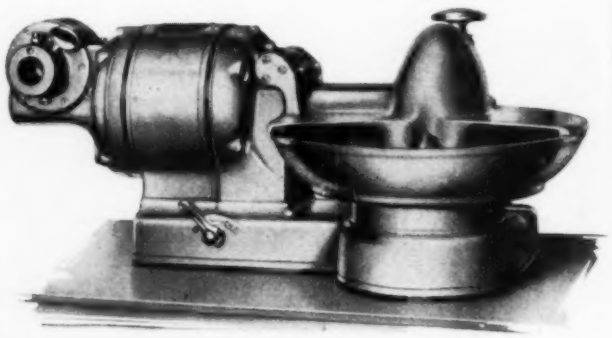
Food Cutters for the Small Kitchen

Food cutters have been used in the larger hospital kitchens to accelerate the preparation of salads, meat loaves and all forms of minced and sliced foods. A smaller model of food cutter is being made that embodies all the cutting facilities of the larger machine, but is of a capacity and price that make its installation possible in the small kitchen.

The unit is composed of a ⅓ h.p. 60-cycle motor that turns the revolving bowl (15 inches in diameter by 4½ inches deep) and cutter which are on one side. It is connected on the other side to a hub where various devices such as meat chop-



This new food cutter is suitable for use in the small kitchen.

pers, slicers, juice extractors and grinders may be attached. An interlocking safety switch makes it impossible to start the machine until the blades are covered. The knives are so guarded that it is impossible to touch them inadvertently while they are in motion.

The complete machine weighs about 100 pounds and is supplied with or without a pedestal base. This small machine in most cases could be advantageously placed on a table rather than on a pedestal. Maintenance should be limited to the sharpening and replacing of knives. The speed with which a bowl of food is cut varies from twenty-five to thirty-five seconds. This short time spent in preparation of food should mean a reduction in food costs, a vitally important feature in successful kitchen management.

How Linoleum Floors May Be Kept in Good Condition

New linoleum should be waxed as soon as possible after it is laid, says an article on the maintenance of linoleum floors in a recent issue of *Buildings and Building Management*. The main thing in preserving linoleum is to shield it from wear with the coating of wax, which not only takes the wear but keeps dirt and dust from being

The VISITOR'S impression is important, too . . .

NO GLOOM HERE! *Patients and visitors like the cheery colors of this Armstrong's Handmade Embossed Floor in the solarium of the York Hospital, York, Pa.*

and clean, cheerful floors help make that impression good

HOSPITAL decoration must necessarily be simple, yet it need not be cold and dreary. At the York Hospital, York, Pa., a floor of Armstrong's Linoleum gives a bit of warm color which effectively dispels that "institutional" feeling. Visitors feel as comfortable as though they were in a fine hotel . . . and they spread the word to their friends.

Besides being good to look at, Armstrong's Linoleum Floors are pleasant to walk on. They have just the right degree of resiliency to absorb shocks and noisy footsteps.

Right now you may be faced with the prospect of re-surfacing your floors. We suggest that you consider applying the money you would spend, to the cost of installing Armstrong Floors. Once your Armstrong's Linoleum Floors are installed you need never spend a cent on sanding, scraping, or re-surfacing. An occasional waxing is the only care Armstrong Floors require.

The 32 page color-illustrated book "Public Floors of Enduring Beauty" will help you decide this matter. It's free. Address Armstrong Cork Company, 1210 State Street, Lancaster, Penna.

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Armstrong's Linoleum Floors

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ground into the linoleum itself. This coating, therefore, must be applied before the linoleum is long exposed to use.

In the initial waxing a paste wax may be used. It should be applied rather heavily, well worked into the linoleum and then polished. The first coat of wax should be allowed to dry thoroughly. When the volatiles have evaporated, and the wax has had a chance to set, the surface is polished. The maintenance operations will depend entirely on traffic conditions the particular surface is subjected to. Daily sweeping is necessary to remove loose dirt that would otherwise gradually be pounded into the wax coating where traffic is heaviest.

When Rewaxing Is Necessary

Before the floor is actually rewaxed a new surface can be given the wax coating by the "hot mop" process. A full size mop is immersed in clear, hot water, wrung quite dry and then applied quickly to the floor. The heat of the mop softens the hard wax finish enough so that dirt that might be embedded in the surface can be mopped off. The mopped surface is then run over with the waxing machine. Such a process will extend considerably the periods of rewaxing, and gives a better surface than is possible for the first coat of wax.

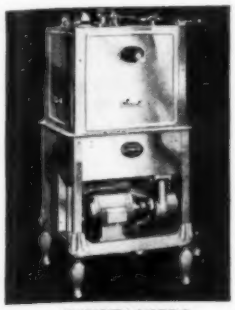
When it becomes necessary to apply a new wax finish, the linoleum should first be well cleaned. If it is not too dirty, mopping with soap and water may be sufficient. A little scouring powder may be used with the mop, but it should be used sparingly since it is liable to injure the surface of the linoleum.

If the floor is in a bad condition, it is scrubbed thoroughly either with a deck brush or with a suitable brush fitted on to the polishing machine. Soap and water are used, with a little scouring powder if necessary. This scrubbing is an extreme method, and should not be necessary more than about once a year. The floor is then rinsed and dried thoroughly before the new coating of wax is put on.

A Lamp That Both Irradiates and Illuminates

A lamp that provides artificial illumination and ultraviolet radiation at the same time has recently been placed on the market. The fixture is simple in construction and easy to install and maintain in that no supplementary light globes are needed or any second wiring circuit. It is reasonably priced.

The unit is recommended for use in doctors' and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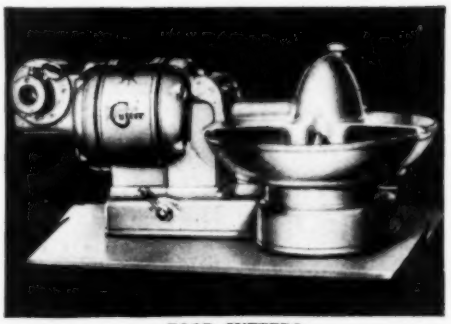
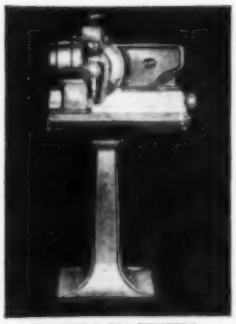

FOOD CUTTERS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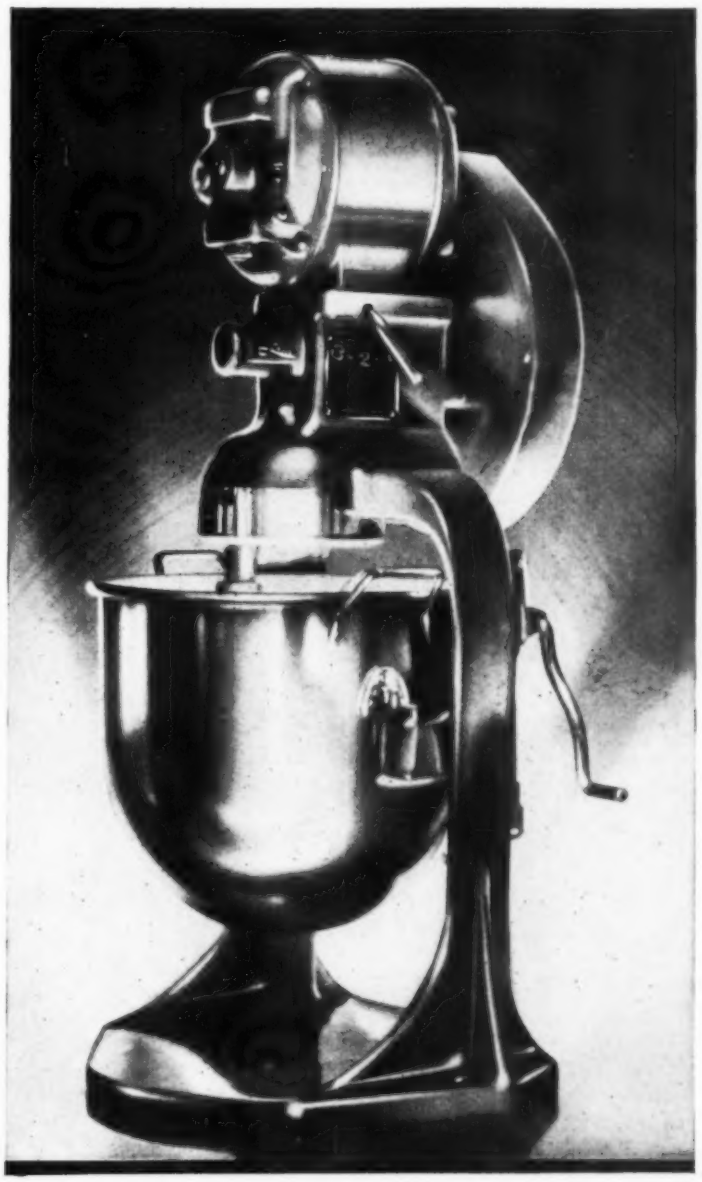

The Famous Hobart 10-Quart Mixer—ChefsAid—shown opposite—whips 2 quarts of cream in 4 to 8 minutes, makes a gallon or more of mayonnaise, 8 pounds mashed potatoes, 10 custard or pumpkin pies. Always ready for dozens of jobs.

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